TOWARD AN UNDERSTANDING OF DEMOGRAPHIC CHANGE AT THE CITY UNIVERSITY OF NEW YORK: 1990 – 2010

by

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Abstract

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This dissertation examines demographic changes at The City University of New York (CUNY) between 1990 and 2010, including changes in the age profile and racial/ethnic composition of enrolled undergraduates. Data from the CUNY Institutional Research Database (IRDB) shows the undergraduate student body has changed over the last 20 years. Most undergraduate enrollment growth has occurred in the community colleges, while growth has been more limited in the senior colleges. The number of students age 25 and older declined 12.5 percent in the senior colleges, while remaining stable in the community colleges. The number of Black students declined 15.3 percent over the 20-year period in the senior colleges.

Changes at CUNY are partly symptomatic of demographic changes within New York City (NYC), rising NYC high school graduation rates, and the expanding for-profit higher education sector. Low-income, minority, and older students increasingly enroll in for-profit colleges. Data from the Integrated Postsecondary Education Data System (IPEDS) shows that student enrollment growth in the for-profit sector vastly outpaced growth in the private and public sectors. While the percentage of older students and Black students has declined at CUNY, there has been substantial enrollment growth of such students in the for-profit sector.

CUNY's own policies and practices have also played a role in the sorting of particular student groups across the university. Data from the CUNY Application System (CAS) shows that

the number of applicants listing a community college as their first-choice has declined. A stronger preference for the senior colleges has occurred while admissions requirements at the senior colleges have increased and larger proportions of students have instead been allocated to community and comprehensive colleges. Over the study period, CUNY senior colleges showed an increase in the average credentials of allocated students, while the average SAT scores of students allocated to community colleges showed little change.

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Chapter 1. Introduction

As the public higher education system serving New York City (NYC), the City University of New York (CUNY) is deeply rooted in the tradition of expanding educational opportunities. When public higher education was first developed in New York City in 1847, working class citizens lobbied for expanded educational opportunities for their children. During the early twentieth century, as the number of immigrants in the city swelled, there was demand for expansion of public higher education. In the 1960s the CUNY system began to take shape, and late in the decade, in response to protests, the University took steps to quickly and dramatically expand access for low-income and minority students.

For more than 165 years, CUNY has been challenged to provide genuine opportunity for the many New Yorkers who look to higher education as a vehicle for improving their lives. In Fall 2011, 239,103 undergraduate students were enrolled in CUNY, including 141,391 students enrolled in senior and comprehensive colleges, and 97,712 students enrolled in community colleges (The City University of New York, Office of Institutional Research and Assessment, 2012a). Serving more than a quarter-million individuals through credited undergraduate coursework, there is a substantial relationship between CUNY and the availability of opportunity in New York City.

This dissertation will consider various dynamics that have influenced the demographics of enrolled undergraduates at CUNY over the last two decades. The pipeline to CUNY is related to the demographics of New York City, the percentage of students who graduate from New York City high schools, competition from other higher education providers, and the availability of financial aid. Two trends with significant implications for access will be analyzed – the expanding for-profit sector of higher education and rising admissions requirements at CUNY.

In 1991 there were approximately 159,500 students enrolled in for-profit colleges nationally, encompassing only 1.3 percent of higher education enrollments. By 2009 for-profit colleges enrolled almost 1.6 million students, amounting to 9 percent of all higher education enrollments (see Table 7.7). Enrollment growth in the for-profit sector has been especially pronounced among students who are low-income, Black, and older than the traditional college student (Aud et al., 2012; Swail, 2009; U.S. Senate Health, Education, Labor and Pensions Committee, 2012). For example, the number of students age 30 to 39 enrolled in public 4-year institutions declined 19.1 percent between 1993 and 2009 (from 518,475 to 419,579), while the number of such students increased 1,437.3 percent in for-profit 4-year institutions (from 22,023 to 338,568) (see Table 7.11). As for-profit institutions draw some of the most disadvantaged students, CUNY's student body might change accordingly.

CUNY's admissions requirements also warrant attention. In 1998 a Board Resolution ended remediation at the senior colleges, requiring that students with remedial needs begin at a community college. Admissions standards such as the required SAT score have also been increased at many of the senior colleges. As CUNY strives to increase quality by raising admissions requirements, the demographics of enrolled students are likely to change. In a study of demographic change at CUNY between 2001 and 2010, Treschan and Mehrotra (2012) found, "As CUNY schools have become more competitive, there are fewer options for black and Latino students" (p.16).

Although CUNY is dedicated to providing access and quality, the conceptualization of "quality" that pervades higher education puts these two principles into fundamental conflict. Measures of quality, such as the academic credentials of entering freshmen, are correlated with race/ethnicity, income, and age. An emphasis on quality has occurred in a particular political and

economic context. To ensure the public's confidence, CUNY must demonstrate positive outcomes, particularly graduation rates. CUNY must also operate in a climate of increasingly scarce resources for higher education. Furthermore, faculty members want to engage in advanced teaching and research, and high achieving students want to learn in an environment with other high-achievers.

Related to CUNY policies, the expanding for-profit sector, and other dynamics, there have been demographic changes in the CUNY undergraduate student body. Notably, demographic changes have occurred throughout the CUNY system in both the selective four-year colleges and in the open-access community colleges. This dissertation will explore the historical, political, and economic context for these changes, closely examine the extent of demographic change at CUNY, and consider possible reasons these changes have occurred.

Arguments for Broad Access to Public Higher Education, and Inhibiting Factors

The benefits of higher education attainment for individuals, including for those with weak academic preparation, have been well documented (Attewell & Lavin, 2007; Barrow & Rouse, 2006; Symonds, Schwartz, & Ferguson, 2011). Without higher education, a person is less likely to find employment and earn a living wage. Beyond benefits for individuals, the importance of increasing the country's overall level of educational attainment has become apparent. As stated by Goldin and Katz (2008), the lack of higher education attainment, particularly among low-income and minority people, is "robbing Americans of the ability to grow strong together" (p. 323).

In *The Race between Education and Technology*, Goldin and Katz (2008) examine the relationships between educational attainment, technological advancement, and wage inequality,

arguing that these dynamics are inextricably linked. Goldin and Katz (2008) indicate that wage inequality has risen since 1980 because educational attainment has not kept pace with technological change. Goldin and Katz (2008) explain:

> As technological change races forward, demand for skills – some new and some old – are altered. If the workforce can rapidly make the adjustment, then economic growth is enhanced without greatly exacerbating inequality of economic outcomes. If, on the other hand, the skills that are currently demanded are produced slowly and if the workforce is less flexible in its skill set, then growth is slowed and inequality widens. Those who can make the adjustments as well as those who gain the new skills are rewarded. Others are left behind. (p. 352)

Goldin and Katz (2008) found that cohorts born between 1870 and 1950 experienced an increase in education of approximately 0.8 years per decade, with children likely to obtain higher levels of education than their parents. For example, by the mid-1800s, the United States had the highest rate of elementary school enrollment in the world. The transition toward universal high school enrollment began in 1910 and was largely complete by 1940, and later in the twentieth century there was tremendous growth of public higher education. During the first three-quarters of the twentieth century there was economic growth and declining inequality, but after 1980 educational attainment stopped rising and inequality grew (Goldin & Katz, 2008). According to Goldin and Katz (2008), "The slowdown in the growth of educational attainment… is the single most important factor increasing educational wage differentials since 1980 and is a major contributor to increased family income inequality" (p. 325).

Goldin and Katz (2008) indicate that the slowdown in educational attainment has resulted from a lack of financial aid and inadequate academic preparation. While little is being done to

expand the availability of financial aid, there has been ongoing attention paid to issues of quality in higher education. One result of the focus on quality has been that the higher education system has become less open and forgiving. As explained by Goldin and Katz (2008), "Forgiveness and an absence of strict standards might further years of schooling but they do little to increase the quality of education" (p. 345). Institutions of higher education have increased admissions standards, partly as a way of ensuring that those entering will successfully graduate.

The tradition of using academic credentials as a bar for admission to higher education, coupled with a lack of full financial support for students pursuing higher education, leads to significant challenges for providing access to low-income and minority students. *Right versus Privilege*, by Lavin, Alba, & Silberstein (1981), examines the fundamental question of whether higher education should be made available for everyone or reserved for those who can demonstrate they are deserving of the opportunity. Referencing CUNY's 1969 policy that guaranteed admission to the University for high school graduates and greatly expanded access for minority students to the senior colleges, Lavin et al. (2008) indicate, "Open admissions was based on a new premise: college education is a right, just as grammar school and high school education have come to be accepted" (p. 307). But in describing the result of the city's 1975-76 fiscal crisis, Lavin et al. (2008) state, "The budgetary axe fell…with greater force on CUNY than on any other service within New York City, indicating clearly that the concept of higher education as a right is far from universally accepted" (p. 308).

My Perspective

My view of access to higher education is colored by personal experience. I earned my bachelor's degree from a selective private institution, benefiting from the academic caliber of my

classmates and from the prestige of the institution. Having grown up in a small town, in a middle class family, my access to such a college was not expected. Nor was it expected that my mother would earn her bachelor's degree after her children were grown, or that I would pursue my PhD while working full-time and caring for my two young children. I view these examples of access to higher education as opportunities that have helped to define lives, and I know that access to CUNY similarly has a profound influence on students.

My commitment to access has further been influenced through my work as a CUNY administrator within the Central Office of Academic Affairs. In my role at CUNY I have worked to enhance educational opportunities for working adults and for transition-age youth with disabilities. I have also worked on an initiative to streamline transfer within the CUNY system so that students can more easily transfer between the community and senior colleges. From my perspective as an administrator, I see a relationship between the diversity of those who gain access to CUNY and the overall justness and health of the city. Similarly, Bowen and Bok (1998) position their research on the effects of affirmative action at elite universities in the following way: "For us, the missions of colleges and universities have strong educational and public policy aspects and do not consist solely of conferring benefits on particular individuals" (Bowen & Bok, 1998, p.285).

Regardless of socioeconomic background, academic strength, and likelihood of success, the public higher education system should serve those seeking higher education. The system should train individuals for many roles and rungs in our society, effectively fueling our economy. The system should also engage people, prepare them to contribute to our democracy, and foster community. Embedded within this conception of public higher education is the assumption that access is crucial. Individuals should be able to enroll and re-enroll in higher education

throughout the course of their lives. Also intrinsic to this notion of higher education is the belief that education is a right and a public good, and therefore should be provided by our government. If we believe that people should not be trapped by circumstance and lack of opportunity, then we must agree that the mission of public higher education is to serve all members of the community seeking educational services, and we must remain committed to serving students who may not complete their degree.

The CUNY Colleges

Public higher education is available in New York City through the CUNY system of colleges. Within the CUNY system, senior colleges are those that award bachelor's degrees and higher, comprehensive colleges award both associate and bachelor's degrees, and community colleges award associate degrees as the highest degree[1]. Undergraduate education offered through the following senior and community colleges will be the focus of this dissertation:

Senior colleges:

- Baruch College
- Brooklyn College
- City College
- Hunter College
- Lehman College
- Queens College
- School of Professional Studies
- York College

Comprehensive colleges:

- John Jay College of Criminal Justice
- Medgar Evers College
- New York City College of Technology
- College of Staten Island

[1] The classification of the CUNY colleges as described here does not correspond to the Carnegie Classification system.

Community colleges:

- Borough of Manhattan Community College
- Bronx Community College
- Hostos Community College
- Kingsborough Community College
- LaGuardia Community College
- Queensborough Community College

It should be noted that John Jay College began phasing out associate degree programs in 2006 and has since become a senior college. Since John Jay awarded associate degrees during most of the study period, the college is considered to be a comprehensive college for the purposes of this study. The School of Professional Studies first enrolled students in 2005. The New Community College at CUNY first enrolled students in Fall 2012 and is not included in the study.

Structure of the Dissertation

This dissertation seeks to understand the context and substance of enrollment change at The City University of New York. Three chapters will draw heavily from the literature to frame the context of enrollment change at CUNY. CUNY's historical context will be analyzed in Chapter 2, particularly the trajectory of expanding access to public higher education as the CUNY system was formulated, the open admissions policy of 1969, and the shift beginning in 1975 toward limiting access at some colleges in response to concerns about quality. CUNY's economic and political context will be considered in Chapter 3, including unintended consequences of funding constraints and political pressures. Chapter 4 will review why access to CUNY is important, why access to baccalaureate programs and particularly well regarded colleges is important, and factors that influence the underrepresentation of particular groups within higher education.

The study methodology will be described in Chapter 5. Three additional chapters will describe quantitative findings. Chapter 6 will examine changing undergraduate enrollment patterns at CUNY. Demographic change with respect to age, race/ethnicity, and full-time/part-time status will be analyzed. Enrollment patterns at the senior, comprehensive, and community colleges will be examined. These institutions have different characteristics, purposes, and mechanisms for admission. Examining enrollment across the entire CUNY system, while also comparing enrollment at the senior, comprehensive, and community colleges, will allow for a more complete understanding of access to public higher education in New York City.

Chapter 7 will explore factors that may have contributed to demographic change that might be considered "external" to CUNY. These external factors include changing demographics in New York City, changes among New York City high school graduates, and the changing landscape of higher education as particular sectors and levels of higher education experience differential growth and draw different types of students. Finally, Chapter 8 will explore first-time freshmen student applications and the allocation of applicants to the CUNY colleges, considering both the race/ethnicity and age of applicants.

The age of enrolled students is a key variable in this dissertation. In particular, I will compare students age 25 and older, with students under the age of 25. Students who are age 25 or older are considered independent for financial aid purposes[2]. These students have not followed the traditional path of someone who transitions to college directly from high school and proceeds through college linearly. Older students may have tried college before, but dropped out for some

[2] To be considered independent for federal financial aid for undergraduate education, applicants must be one of the following: age 24 or older, married, a veteran, an emancipated minor, homeless, placed in foster care, have a child or other dependent, or have both parents that are deceased (U.S. Department of Education, 2010). Although 24 is the cut-off for independent status for financial aid, entities such as the U.S. Census Bureau and CUNY Office of Institutional Research and Assessment often use 25 as the cut-off point for data analyses.

reason. Work and family obligations may make it difficult for older students to complete a degree quickly.

Chapter 2: CUNY's Historical Context

Public higher education in New York City has evolved dramatically over the last 165 years – from the Free Academy's entering class of 143 boys in 1847 (Rudy, 1949), to the more than 239,0000 undergraduates enrolled in 18 different institutions in Fall 2011 (The City University of New York, Office of Institutional Research and Assessment, 2012a). CUNY has developed in response to ongoing demands for access to public higher education, as well as financial and political realities. This historical context allows us to better understand the CUNY of today.

NYC's First Institution of Public Higher Education

Today known as City College, the "Free Academy" was created in 1847 after being proposed by the NYC Board of Education, passed by the New York State Legislature, and approved by public referendum. It was the first institution in New York City to offer higher education free of charge to students and paid for by the city. Around the time of the Free Academy's founding there were varying opinions about the purpose of higher education. In response to calls for practical coursework, an influential report was written at Yale in 1828 (Rudolph, 1990). The Yale Report maintained the traditional humanist view that all educated people should be familiar with a specific body of knowledge. The idea that students should focus on topics of particular interest or relevance was rejected and the aristocratic purpose of education was posited as the ideal.

There was ambivalence about the use of the higher education system to provide practical training because very few jobs required higher education. There was not yet a clear connection between higher education, the nation's economy, and social mobility. When the Free Academy

was founded there were just two private colleges in New York City: Columbia College and the University of the City of New York (later renamed New York University) (Roff, Cucchiara, & Dunlap, 2000). Proponents of the Free Academy believed higher education should be widely accessible, criticizing the low number of students served by these private institutions and the tuition costs they charged that made it difficult for children of the working class to attend (NYC Board of Education, 1847). Organizations of working people had lobbied for expanded educational opportunities for the children of their members, forming the Working Men's party in 1829 based on a platform of universal education (Rudy, 1949).

Townsend Harris, President of the Board of Education and the leading advocate for creation of the Free Academy, expected that most students would go on to work in the same positions their fathers held. He also believed higher education could better prepare young men to be productive workers and so practical coursework was emphasized accordingly. The idea that the average worker did not require a high level of education was rejected. In a report of the New York City Board of Education (1847), it was stated, "That the mechanic in some countries is considered as a mere machine, is only based on his admitted ignorance; educate him, and he instantly becomes a scientific man (p. 22).

The Board of Education held that students educated through the Free Academy would help to inject knowledge and dignity into the industrial world. It was said that those who attended the Free Academy would be, "eminently qualified to infuse into their fellow workmen a spirit that would add dignity to labor… while at the same time the diffusion of correct knowledge among the working class of our population, would make them better acquainted with their inestimable value" (NYC Board of Education, 1847, p.21).

In an appeal to the New York State Legislature for funding to create the Free Academy, the board suggested that higher education for children of the working class was needed to preserve stability within society. The report said, "The permanency of our free institutions, the future state of society, the extent to which the laws of the country will be regarded, and social quiet and order preserved, depend essentially upon the virtue and intelligence of the people" (NYC Board of Education, 1848, p.7).

Free higher education was viewed as a motivational mechanism meant to ensure that citizens believed in the justness of American institutions and developed willingness to participate in the American economy. The report expanded further on the need for meritocratic institutions to motivate the working poor.

> The certainty of a young man of good abilities…of having the opportunity of gaining as extensive an education as can be acquired in any institution in the State, if his parents can only furnish him the means to subsist at home, is in the highest degree cheering, while the certainty that the limited earnings of his parents will preclude him, in the existing state of things, from having any such advantages, tends to repress all such generous aspirations, paralyze effort, and prevent the full development of his ability to become extensively useful to the class in which his lot may be cast, or to society at large. (NYC Board of Education, 1848, p.8)

The Board of Education recognized that opening the Free Academy to children who had attended New York City common schools could spark systemic improvements, as elementary school leaders and teachers became motivated to ensure that graduates could pass the Free Academy's admissions test. Middle class residents would thus be more inclined to send their children to the common schools so they might reap the advantages of attending the Free

Academy. According to the NYC Board of Education (1847), "the establishment of the proposed institution would no doubt exercise a beneficial influence on our Public Schools. Admission into it would be a high prize, for which each scholar would contend, and this, in the strife to obtain mental superiority, all would be improved" (p.20).

Although there was much support for the Free Academy, there were also outspoken critics. Some distrusted higher education for the masses and resented the use of public resources for such purpose. According to conservatives, higher education was "the prerogative of private enterprise" (Ravitch, 1974, p.103). Continuing into the first decades of the Free Academy's existence, there was ongoing disagreement about the use of public funds to finance the Academy. In 1877, New York State Governor Lucius Robinson stated in his inaugural address that the use of tax dollars for the Free Academy was "legalized robbery" (Ravitch, 1970, p.103). A report to the New York Municipal Society in 1878 stated that the system was "a departure from a system good enough for our fathers 50 years ago" (Ravitch, 1970, p.103).

In spite of such opposition, the Free Academy was created and went on to flourish, providing opportunities for students who did not have the means to attend private institutions. In 1849, Dr. Horace Webster made the following statement at the opening ceremony for the Free Academy: "The experiment is to be tried, whether the highest education can be given to the masses… and whether an institution of learning of the highest grade can be successfully controlled by the popular will, not by the privileged few" (Marshak, 1973).

When the college opened most students were "either native Americans of the working classes or descendants of immigrants from northern and western Europe" (Marshak, 1970, p.8). According to the historian S. Willis Rudy (1949), students came from various economic and social classes, but were predominantly middle or working class. Some were sons of doctors and

lawyers, but some were also sons of laborers. Most poor families needed their sons to work to help support the family and wealthy families preferred to send their sons to private colleges. The proportion of Jewish students from immigrant families expanded markedly during the late nineteenth century, reaching approximately three-quarters of the student body by 1900 (Rudy, 1949).

By 1906 almost 3,000 students had graduated from City College and many more students had attended but not graduated (Roff, Cucchiara, & Dunlap, 2000). The college was relocated to the St. Nicholas Heights campus in uptown Manhattan in 1907 due to space constraints at the original campus at Lexington Avenue and 23rd Street (Roff, Cucchiara, & Dunlap, 2000). In 1919 offerings were expanded with the opening of a School of Business and Civic Administration and a School of Technology, and in 1921 the School of Education was established (Marshak, 1973).

Opportunities for Women

Shortly after founding the Free Academy, the Board of Education proposed that a free institution of higher education be developed for women. In a report to the NYC Board of Education dated November 14, 1849, it was stated, "the blessings of a superior education are placed within the reach of half the children of the city. It is now proposed to place the same blessings within the reach of the other half" (p.3). Yet there was considerable opposition. As explained in the report, many felt that higher education was not appropriate for women because they were not to be prepared for work. "It may be said that the object of giving a free education of an elevated character to boys is to fit them for usefulness in society. They are trained for the occupations of busy life" (NYC Board of Education, 1849, pp.3-4).

However, women were beginning to demand the same legal rights afforded to men, including the right to vote. Some women sought higher education and employment as mechanisms for greater freedom and autonomy than had traditionally been available to women. In particular, teaching was viewed as a profession that was appropriate for women and there was interest in creating a "normal school" for women, an institution that prepares teachers. Roff, Cucchiara, & Dunlap (2000) describe the dynamics that led to the creation of a publicly-funded normal school for women:

> The establishment of normal schools was closely linked with economic and social developments in America. An economy increasingly based on commerce, industry, and technology required a work force with a higher degree of literacy than was needed earlier in the century. The influx of new immigrants… created a need for "Americanization" programs in the schools. More and better-qualified teachers were required. Consequently, public support for advanced education in the United States gained momentum, and teacher-training colleges were established with state support. (p. 23)

The legislature approved the board to establish an institution for women in 1854, and in 1870 free higher education became available for women with the establishment of Hunter College as "Normal College" (Rudy, 1949). The lack of higher education options for young women was not unique to New York City. Between 1800 and 1860 just 14 colleges in the United States enrolled women (Thelin, 2004). Hunter College was the first publicly-funded, tuition-free college for women in the country (Roff, Cucchiara, & Dunlap, 2000).

As opportunities for women expanded in the workplace there were calls to grant women access to other types of educational programs offered by City College. In 1929 a committee appointed by the Board of Higher Education recommended that women be admitted to all

technical and professional courses at City College (Roff, Cucchiara, & Dunlap, 2000). However, few women were enrolled in such courses at City College until many male students left to fight during World War II (Roff, Cucchiara, & Dunlap, 2000). In 1951 with the start of U.S. military involvement in Korea, female students were granted access to City College of Liberal Arts and Science and male students were granted admission to Hunter College's Bronx campus (Roff, Cucchiara, & Dunlap, 2000).

The University Develops

As many immigrants arrived from Eastern Europe, New York City experienced a population explosion in the early 1900s, from 3.4 million in 1900 to 5.6 million in 1920 (Roff, Cucchiara, & Dunlap, 2000). There had also been a large expansion in high school enrollment, resulting in an increase in the number of student eligible to attend college (Lavin, Alba, & Silberstein, 1981). In an effort to contain enrollment, in 1926 for the first time City College required a high school average of 72 for admission (Lavin, Alba, & Silberstein, 1981).

City College and Hunter College became overcrowded and began offering the first two years of college level work at sites in the other boroughs. City College began offering such coursework in Brooklyn in 1917 and in Queens in 1924. Hunter College began offering the first two years of college work in Brooklyn in 1924 and in the Bronx in 1931 (Roff, Cucchiara, & Dunlap, 2000). Eventually, the boroughs of Brooklyn and Queens obtained their own baccalaureate degree granting colleges: Brooklyn College was authorized in 1930 and Queens College in 1937 (Roff, Cucchiara, & Dunlap, 2000).

The New York State Legislature recognized the need to coordinate higher education in New York City. In 1926 the legislature created a Board of Higher Education to oversee the

publicly funded institutions of higher education in the city. The board was created by merging the Boards of City College and Hunter College, each of which had been given their own independent board through legislative action in 1900 and 1915, respectively (Gordon, 1975). The legislation that created the Board of Higher Education also authorized the board to charge tuition. The board instituted tuition charges for students attending evening sessions, while day students who had to meet higher admissions standards attended for free (The City University of New York, 2012a). Collecting student fees made it possible for the university to expand access for increasing numbers of students. During the Depression, with some calling for a shutdown of the university, admissions standards for the free baccalaureate programs were raised and increasing numbers of students were offered admission instead to the fee-based evening program (The City University of New York, 2012a). Those who earned their associate degree and met admissions standards could then pursue a baccalaureate degree for free (The City University of New York, 2012a).

In the 1940s there were various efforts to expand access, particularly access to technical training. World War II had increased demand for skilled technicians and many educational institutions were creating new training programs (Frommer, 1986). In 1943 the New York City Board of Education and the New York State Regents proposed that two-year institutes be created by the state for the provision of technical and applied training (Frommer, 1986). In 1946 the state established five such institutes, including the New York Institute of Applied Arts and Sciences in Brooklyn, later named New York City College of Technology (Frommer, 1986). Giving preference for admission to war veterans, the institution was tuition-free and combined general education and technical training.

Following the war, there was increased demand for higher education and admissions requirements were increased at the municipal colleges (Lavin, Alba, & Silberstein, 1981). New York's Governor, Thomas E. Dewey, faced political pressure to expand public higher education opportunities. At the time there was little public higher education outside of New York City, with most higher education provided through private colleges. There were concerns that the private colleges often engaged in discriminatory admissions practices, prohibiting qualified Jews and other minorities from enrolling (Gordon, 1975). In response, Governor Dewey created a Temporary Commission on the Need for a State University (Gordon, 1975). The Commission recommended that the state assume primary responsibility for funding public four-year liberal arts colleges, as well as post-graduate and professional schools. In contrast, the Commission believed that community colleges should be developed based on local initiative, with funding provided through a combination of local and state funds, as well as student tuition (Gordon, 1975).

Related to the mission of community colleges, the Commission stated: "Although the community college should be designed primarily for students not seeking the usual four-year curriculum, it should provide sufficient general education to enable qualified students to transfer to four-year institutions" (Gordon, 1975, p.48). Following the recommendations of the Commission, in April 1948 state legislation established the new state university and community colleges (Gordon, 1975). The state legislation represented an opportunity for state funds for the provision of the first two years of college work, while the municipal four-year colleges would continue to be funded by the city.

With the availability of state aid, the Board of Higher Education commissioned a study by Donald Cottrell, Dean of the College of Education of Ohio State University, to assess the

need for expanded opportunities for higher education in the city. In 1950, the Cottrell Report recommended that higher education be expanded through the establishment of community colleges in Staten Island, in the Bronx, in Queens, and in Brooklyn. The report estimated that there were at least 35,000 individuals "competent and desirous to attend two-year colleges" (Gordon, 1975, p.62).

Much of the expansion for the university was planned for and supported under Mayor Robert F. Wagner, Jr., who held office from 1954 to 1965 (Bowker, 1993). In 1954, Mayor Wagner proposed the establishment of an associate program in police science at the Baruch campus of City College (Gordon, 1975). In 1955 Staten Island Community College was opened, providing the first access to free higher education to residents of the borough (Gordon, 1975). Bronx Community College was established in 1957 and Queensborough Community College was established in 1959 (Gordon, 1975). By the end of the 1950's, even though three community colleges had been established in New York City, only 3,000 students were enrolled in the new institutions, far short of the need projected by the Cottrell Report (Gordon, 1975). But with the launch of Sputnik in 1957 and the educational fervor that followed, there was new energy for the expansion of higher education. Nelson Rockefeller assumed the New York governorship in 1959 and placed the creation of a strong public higher education system as a top priority (Gordon, 1975).

In 1959 the Board of Higher Education created the Committee to Look to the Future, which recommended creating an integrated university system authorized to grant the doctoral degree (Gordon, 1975). Also in 1959, the state passed the Mitchell-Brook Law, which expanded higher educational opportunities, including within the municipal college system. The law provided for one-third of the operating costs for educating students in the senior colleges, an

equivalent contribution to what was already provided for the community colleges. Funding was also to be provided for capital costs (Gordon, 1975). In 1961 Governor Rockefeller signed a law that created the City University of New York (CUNY), thereby uniting the existing municipal community and senior colleges in an integrated university system. The law also created the CUNY Graduate Center and granted the Board of Higher Education the authority to impose tuition (Roff, Cucchiara, & Dunlap, 2000).

In 1962 the Committee to Look to the Future released a master plan for the university through 1975, A Long-Range Plan for the City University of New York. The plan specified that access to higher education should be expanded such that 50 percent of all high school graduates would be admitted to CUNY, with the assumption that 30 percent would enroll (Gordon, 1975). The plan emphasized the importance of community colleges within the university system, and recommended that faculty salaries at the community colleges be raised to the level of salaries in the senior colleges. The plan also indicated that transfer agreements should be developed to facilitate student movement between the community and senior colleges. As a result, the community colleges were to develop a liberal arts emphasis and the transfer function was to be a substantial component of their mission (Gordon, 1975).

The Board of Higher Education began to take steps to assert authority over the newly created municipal college system. Because of the state funding provided for community colleges, the board had called the existing community colleges "our State University community colleges." But in the early 1960s, the terminology was discarded (Gordon, 1975). The board established the Borough of Manhattan Community College and Kingsborough Community College in 1964 (Gordon, 1975). Also in 1964 the board acquired the New York State Institute of Arts and Sciences, which it renamed New York City Community College (Gordon, 1975).

Finally, the board made clear its intention to integrate the community colleges by extending free tuition to those institutions in 1964. In contrast, the State University system imposed tuition (Gordon, 1975).

The university continued to grow in size and complexity. Hostos Community College was established in 1969 and LaGuardia Community College was established in 1971 (Roff, Cucchiara, & Dunlap, 2000). There was also expansion of baccalaureate degree granting institutions. In 1964 John Jay College was established, growing out of the program in police science offered by the Baruch School which was affiliated with City College.[3] In 1965 Richmond College was created on Staten Island to offer students who had obtained their associate degree the opportunity to complete upper level coursework and earn their baccalaureate degree (Roff, Cucchiara, & Dunlap, 2000). York College was opened in Jamaica, Queens in 1966; the Baruch School became an independent entity, Baruch College, in 1968; and also in 1968 the Bronx campus of Hunter College became Lehman College (Roff, Cucchiara, & Dunlap, 2000). In 1971 Medgar Evers College was opened in Brooklyn and in 1976 Richmond College and Staten Island Community College merged to create the College of Staten Island (Roff, Cucchiara, & Dunlap, 2000).

Albert H. Bowker, who served as the second Chancellor of CUNY from 1963 to 1971, described the dynamics that called for an expanded university system in an interview with Julius C. C. Edelstein, who served as Senior Vice Chancellor of CUNY and was a leading proponent of open admissions. Bowker (1993) said,

[3] John Jay has offered both baccalaureate and associate degrees, but began phasing out the associate degree in 2006 (Travis, 2006).

> The first year I was here, I believe, talked him into something I called shoehorn, which was to increase by a few thousand students the enrollment in the senior colleges. The system was just terribly inadequate to needs. The GI's, the children after the war, the baby boom, was coming of college age… and then the minority communities in New York were having college age kids and were demanding access to the university. So we were under enormous enrollment pressures, it seemed to me, and Wagner's main response was to help us begin to expand the university, start new institutions.

Open Admissions at CUNY

During the 1950s and 1960s attending college became increasingly popular in New York City, and admission to the CUNY senior and community colleges became more competitive (Attewell & Lavin, 2007). For example, City College was academically selective and prestigious. In 1920 a student could gain admission to City College with a high school average of 72 or higher, but by the late 1960s students needed an average of 82 or higher and more than three-quarters of admitted students had a high school average of approximately 90 (Lederman & Ribaudo, 1981). In 1964 students needed successful high school records to gain admission to a senior or a community college, with about two-thirds of applicants rejected by all CUNY colleges (Gordon, 1975).

City College remained homogenously White throughout the 1960s, although the demographics of New York City had changed. Beginning during World War I and accelerating during World War II Blacks began leaving the South for northern cities in large numbers. In just thirty years, the proportion of Blacks and Puerto Ricans in the city had increased from 6 percent to almost one-third in the city (Traub, 1994a). Located in Harlem, City College's campus was in

an area that was largely Black and Puerto Rican. There was an uneasy relationship between the college and the surrounding community. According to Robert E. Marshak (1973), President of City College during open admissions, many in Harlem perceived of City College as "that white citadel on the hill."

Black and Hispanic students were not as likely to meet CUNY's selective admissions criteria. Many minority students faced poverty and inadequate educational opportunities offered by the New York City public schools. In 1968, of the 353 graduates from the largely minority Boys High School in Brooklyn, just 7 met the admissions requirements at City College (Traub, 1994b). The lack of access to City College for minorities was especially problematic because of changes in the labor market. The city's manufacturing sector was declining, while there were increasing jobs in the service sector that required a college degee (Lavin & Hyllegard, 1996). According to Marshak (1973),

> City College in the mid-1960s… could argue that it was performing its historic social mission by keeping its doors open to anyone whose combined high school average and SAT score exceeded 80%.... and by completely disregarding any criterion other than grades… This approach is tenable if the lower schools are operating at reasonable efficiency throughout, if family environments are uniformly conducive to proper study habits and do not place inordinate work burdens on children and if ghetto life has the potential and holds forth the hope of its own improvement. This ideal set of conditions has never existed. (p.11)

CUNY's Chancellor, Albert H. Bowker, began to take steps to address the underrepresentation of minority students. In 1963 Bowker obtained state funding for the College Discovery program, which was intended to increase the representation of minority students at the

community colleges (Lavin, Alba, & Silberstein, 1981). Bowker also obtained state funding for a small pre-baccalaureate program at City College for minority students who did not meet the regular admissions standards. College Discovery began in 1964 and the City College program was offered during 1965-66 (Lavin, Alba, & Silberstein, 1981). As the availability of city funding was quite limited, Bowker also appealed to the state for funding to expand enrollment. In Summer 1966 the state legislature passed a bill providing funds for an expanded freshman class and a construction fund for future growth. The legislation also provided funding for a minority admissions program, Search for Education, Elevation, and Knowledge (SEEK), which began that fall with 1,000 students (Lavin, Alba, & Silberstein, 1981). By 1968, 700 students were participating in SEEK at City College, and this was the first time that there was a significant presence of minority students on campus (Marshak, 1973). According to Marshak (1973),

> As a result of the SEEK program, hundreds of black and Puerto Rican students became aware for the first time that success at City College offered tickets out of the ghetto, out of inequality, out of truncated futures, and they became impatient with the pace of enrollment of their "brothers and sisters" at this institution. (p.12)

Chancellor Bowker believed that CUNY needed to further expand access and relax admissions standards to adequately serve New York City and maintain political credibility (Lavin & Hyllegard, 1996). Admissions policies also needed to change because student enrollment was beginning to decline as middle class students more frequently chose to attend the State University of New York or private colleges (Lavin & Hyllegard, 1996).

In 1966 Bowker had successfully persuaded the board to approve a resolution supporting admission for all applicants that was to begin in 1975. The 1964 and 1968 CUNY master plans

also referenced the goal of open admissions. There was to be a stratified admissions policy, whereby the top 25 percent of high school graduates would be allocated to senior colleges, the top two-thirds would be allocated to community colleges, additional students would be admitted through the SEEK and College Discovery programs, and others would be eligible for enrollment in educational skills centers (Lavin, Alba, & Silberstein, 1981).

But in 1969, student protests erupted at the CUNY colleges. Notes from Julius Edelstein indicate that protesters at Baruch, Brooklyn, Lehman, Queensborough, and Queens wanted greater access for Blacks and Puerto Ricans. There were also demands for an increased number of Black and Puerto Rican staff and administrators (Duitch, 2010). At Queens College, in February 1969 a coalition of Black and Puerto Rican students and staff demanded the appointment of a Black faculty member to direct the SEEK program. Dr. Joseph P. McMurray, President of Queens College, agreed to appoint the Black faculty member after protesters ransacked the office of the existing White director (The New York Times, 1969a).

Also in February 1969, Blacks and Puerto Ricans presented a list of five demands to City College President Buell Gallagher. It was demanded that there be: 1) establishment of a school of Black and Puerto Rican Studies, 2) a separate orientation program for Black and Puerto Rican students, 3) a voice for students in the administration of the SEEK program, including the hiring and dismissal of personnel, 4) entering freshman classes that included Black and Puerto Rican students proportional to their representation in New York City high schools, 5) requirements for all education majors to include Black and Puerto Rican history and the Spanish language (The New York Times, 1969b). When President Gallagher did not immediately respond to the demands, protesters ceased control of the administration building for four hours, and in the days that followed students engaged in vandalism and violence (The New York Times, 1969c).

In the midst of student protests for increased access, there were threats of significantly reduced state and city funding for CUNY. In March 1969 approximately 13,000 CUNY students rallied in Albany in protest over the cuts (The New York Times, 1969d). In early April, President Buell Gallagher stepped down over the budget cuts, which he said would result in 20 thousand students being shut out from admission. Out of 27 department heads at City College, 23 also resigned in support of President Gallagher (Lavin, Alba, & Silberstein, 1981). In his resignation letter to the board, Gallagher said,

> Having taken every step, but one, in an effort to avert this catastrophe, I now take that final step. For 16 years, I have bent my back to the effort of holding wide the door of opportunity to the youth of this city and state who are so rich in everything but money. I am now asked by officers of government to change my position, to stand in the door and keep students out. I shall not accede. (The New York Times, 1969e)

The situation became increasingly volatile. On April 4th, Martin Luther King, Jr. was assassinated. Gallagher, still serving as President of City College although he had given notice, closed the college from April 3rd to May 5th (The New York Times, 1969h). The closing of the college became a political issue, as Mario A. Procaccino, a candidate for Mayor, insisted that the college be reopened (The New York Times, 1969g). On May 8th, arsons set fire to the City College Finley Student Center, causing substantial damage (The New York Times, 1969f). The next day the Executive Committee of the Board of Higher Education met with student protesters and agreed to one of their demands, that students in the School of Education be required to take courses in Spanish language and Black and Puerto Rican history (The New York Times, 1969f).

There was much debate about how best to expand the representation of minority students at CUNY. Following the assassination of Martin Luther King, Jr., Bowker and the board

proposed a Top 100 Scholars Program for admission to senior colleges, whereby the top 100 students in each high school would be guaranteed admission to a senior college. Using high school rank instead of GPA would insure that more minority students, who typically attended segregated high schools, could enroll. The stated intention of the proposal was to insure that minority students would be represented at CUNY in the same proportion that they were represented in the city (Lavin, Alba, & Silberstein, 1981).

In May, student protesters and the administration at City College came to an agreement on another proposal. This plan proposed that 50 percent of new freshmen be admitted from the surrounding area without regard to academic criteria, while the other 50 percent would be admitted based on traditional competitive admissions standards (The New York Times, 1969h). However, on June 2nd the City College Faculty Senate rejected the dual admissions plan, instead proposing that just a few hundred additional disadvantaged students be admitted to the college while preserving space for all students who met the existing admissions requirements (Lavin, Alba, & Silberstein, 1981). The fundamental conflict was how to expand representation of minority students while preventing students who met merit-based criteria from being shut out from enrollment.

Eventually political support began to coalesce around the idea of open admissions. According to Lavin, Alba, and Silberstein (1981), "Only the open-admissions notion offered something to everyone and seemed to lay to rest the specter that increased representation of some groups would come at the expense of other groups" (p. 15). As ratified by the board on July 9, 1969, open admissions was decided upon as the best alternative and the timetable was moved up to Fall 1970 (Lavin, Alba, & Silberstein, 1981). The specifics of the plan were developed and authorized by the board in November 1969. Students who had a high school average of 80 or

above, or students who ranked in the top half of their class, were guaranteed admission to a senior college. All other students were eligible to enroll in a community college. If there were not enough spaces in a particular college slots would be awarded based on high school average. The plan also specified that anyone who graduated from a community college would be guaranteed admission to a senior college. Furthermore, the SEEK program was expanded and counseling and remediation was put in place to assist academically week students (Lavin, Alba, & Silberstein, 1981).

The open admissions policy greatly expanded access to the senior colleges for minority students. In 1969 just 4 percent of all CUNY senior college students were Black or Hispanic, compared to 16 percent in 1970 (Attewell & Lavin, 2007, p.16). The number of freshmen doubled, and by 1975 total enrollment within the CUNY system grew to approximately 250,000 students (Attewell & Lavin, 2007, p. 15). Another consequence of the policy was the presence of many more students at CUNY with weak academic preparation. For example, in 1969 just 124 entering freshmen at City College had a high school average between 70-79, while the number increased to 854 in 1970 and to 1,473 in 1971 (Marshak, 1973, p.27). Testing programs were developed to determine placement in remedial coursework in reading, writing, mathematics, and English as a Second Language (Lederman & Ribaudo, 1981).

The Fiscal Crisis and its Impact on Open Admissions

The open admissions policy was undertaken without adequate consideration of the resultant financial impact. CUNY's budget increased from $67 million in 1960-61 to $325 million in 1970-71, the first year of open admissions (Lavin, Alba, & Silberstein, 1981). Meanwhile, the fiscal situation of New York City was becoming increasingly precarious. As

middle class White residents and many corporations left the city, resulting in a shrinking tax base, there was simultaneously an increase in the number of low-income minority residents who needed municipal services (Lavin, Alba, & Silberstein, 1981). Late in the spring of 1975 sharp budget cuts were adopted for all city agencies. In August, additional cuts were announced by the city and due to a legislated funding formula, city cuts for CUNY were accompanied by cuts from the state. The university had expected a budget of approximately $650 million for the 1975-76 academic year, but faced the school year with just $510 million (Lavin, Alba, & Silberstein, 1981).

CUNY's board spent the 1975-76 academic year debating the future of the university given the financial situation, but took no action to deal with the immediate budgetary shortfall. The board was committed to free tuition but was negative toward open admissions, taking note of the widespread negative media attention and claims that open admissions had resulted in a downgrading of standards (Lavin, Alba, & Silberstein, 1981). Rita E. Hauser, an attorney and member of the board, referenced the high proportion of low-income students at CUNY and wrote the following in a New York Times editorial:

> If normal tuition charges were imposed on current undergraduates, massive financial assistance from either the city or state would be necessary. While it is true that some students' families are able to pay tuition, it is these families that are now supporting CUNY indirectly through the city's income, reality, and other taxes. Put another way, "free tuition" is an illusory issue. The open admissions policy, adopted hastily and without regard to dollar costs and educational burdens, is the real issue. (The New York Times, 1975a)

The board addressed the lack of funding by attempting to curtail enrollment, particularly the enrollment of underprepared students. On December 15, 1975, the board passed a resolution requiring uniform standards for satisfactory progress toward a degree. Further, the resolution put in place new standards in basic skills areas as criteria for beginning the junior year of college or for admission to a senior college from a community college. The board also passed a resolution that no applicant would be admitted to the university if they could not demonstrate eighth-grade competency in both reading and math (Lavin, Alba, & Silberstein, 1981). According to Lavin, Alba, & Silberstein (1981),

> the new admissions standard… would have decimated the minority presence at CUNY…using a device that promised to reduce freshmen classes by a third, the board had in effect chosen to terminate the open-admissions policy as an alternative to imposing tuition. This action moved the University away from a central mission to serve disadvantaged minority students. (pp. 297- 298)

The board's policy resulted in a major backlash from the minority community and a lawsuit was filed. An analysis of the potential impact of the policy on minority applicants estimated that about 40 percent of those seeking admission would be denied, and most of those denied admission would be minority applicants (Lavin, Alba, & Silberstein, 1981). The analysis was released to the New York Times, there was a major backlash from the minority community, and a lawsuit was filed (Lavin, Alba, & Silberstein, 1981; The New York Times, 1975b).

As an alternative to the requirement that students demonstrate eighth-grade proficiency to be granted admission, Chancellor Kibbee proposed that those with a high school average of 80 or higher or who were in the top 35 percent of their class be admitted to a senior college. This plan eliminated very few applicants, but allocated a larger proportion of applicants to the community

colleges. The plan also put in place more stringent academic standards which might have resulted in more students facing academic dismissal (Lavin, Alba, & Silberstein, 1981).

In May 1976, the university collapsed financially and was forced to close for two weeks. The Chairman of the Board and several other members resigned. After intense negotiations between CUNY and the state legislature, an agreement was reached whereby tuition would be imposed at CUNY and eligible students could receive financial aid through the New York State Tuition Assistance Program (TAP) (Lavin, Alba, & Silberstein, 1981).

Kibbee's admissions plan was adopted and admissions to the senior colleges became more restricted. In March 1977 the Chancellor's Committee on Movement from the Lower to the Upper Division defined the basic skill areas of reading, writing, and mathematics (Ryzewic, 1982). The Freshmen Skills Assessment Program (FSAP) was established consisting of tests in each of these three subject areas (Lederman & Ribaudo, 1981). Beginning in 1978 these tests were used to place students in remedial coursework (Klein & Orlando, 2000). More than half of all students who entered CUNY senior colleges as freshmen in Fall 1979 took at least one remedial course, even among those with high school averages above 80 percent (Lederman & Ribaudo, 1981).

Reflecting the state's more dominant role, in 1979 the Board of Higher Education became the CUNY Board of Trustees, consisting of 10 members appointed by the Governor and 5 members appointed by the Mayor (Roff, Cucchiara, & Dunlap, 2000). The city's fiscal crisis, the introduction of tuition, and higher academic standards resulted in a sharp decline in student enrollment. By 1980 the student body had declined to 172,000, from a high of more than 250,000 in 1975 (Lederman & Ribaudo, 1981). Without the draw of free tuition many students chose to

attend colleges of the State University of New York (SUNY) or private colleges. Other students were no longer eligible for admission to the senior colleges.

Concerns about the quality of the CUNY student body continued to arise. In 1995 CUNY's Board of Trustees voted to limit the amount of time a student at a senior college could spend in remediation to one year and adopted new high school course taking requirements for admission to a senior college (Gill, 2000). In 1994, Heather Mac Donald, a conservative political commentator, wrote an article entitled "Downward Mobility," critical of CUNY's lax admissions requirements and large remedial programs. Mac Donald (1994) wrote, "Like a compulsive gambler, CUNY continues to direct a disproportionate share of its resources to students with the least chance of success, while academically prepared students are largely left to fend for themselves."

In his State of the City address in both 1998 and 1999, Mayor Giuliani expressed outrage with the quality of CUNY and low graduation rates (Duitch, 2010). Giuliani proposed measures such as raising admissions and graduation requirements and privatizing remediation (Duitch, 2010). As reported in his New York Time obituary, Julius Edelstein said this in response to Giuliani's criticisms of CUNY, "For all its shortcomings, City University is the social engine of the city. The attempt to convert it into Swarthmore or Harvard is ridiculous, and is not what people of New York need" (Arenson, 2005).

In 1998, Mayor Giuliani convened a task force to examine CUNY. A report of the Task Force pointed to the low average SAT scores of incoming students, stating:

> …the levels of preparation of incoming students suggested by these scores have become a matter of considerable public concern in New York. Even CUNY's most selective senior colleges clearly have difficulty attracting well-prepared students; not one college

> enrolls a student body that is consistently above the national average. At several community colleges, test scores indicate a level of student preparation implying a task for the colleges that is nothing short of herculean. (Gill, 2000, p.8)

The task force specifically investigated the tests CUNY used to place students into remedial courses (Klein & Orlando, 2000). It was found that among the incoming 1997 cohort 65 percent of baccalaureate students and 90 percent of associate degree students required remediation based on their placement scores on these tests (Klein & Orlando, 2000). The task force indicated that it was unclear if the FSAT passing scores were appropriate (Klein & Orlando, 2000). Further, the math and reading tests were found to misclassify approximately 14 percent of test takers, with about half of those misclassified as needing remediation when they did not (Klein & Orlando, 2000). The writing test was found to misclassify about 25 percent of all associate degree students and 35 percent of all baccalaureate students (Klein & Orlando, 2000). The task force recognized that changes in admissions policies could have a disparate impact, with Black and Hispanic applicants less likely to meet higher standards than White and Asian applicants. The Task Force reported, "… at least in the short term, the data suggest that raising standards would result in the most selective schools having disproportionately fewer black and Hispanic students than Asian and white students" (Klein & Orlando, 2000, p.25).

In May 1998 (even before the results of the Mayor's Task Force on CUNY were published), the Board of Trustees voted to end remediation in bachelor's degree programs. A timetable was set to abolish remediation by September 1999 at Baruch, Brooklyn, Queens, and Hunter; by September 2000 at Lehman, John Jay, Staten Island, New York City College of Technology, and City College; and by September 2001 for York and Medgar Evers (Duitch,

2010). As a result, students who had not passed the assessment tests were required to complete remedial coursework at a CUNY community college.

Chapter 3: CUNY's Economic and Political Context

Since the board's 1998 decision to eliminate remediation from the senior colleges, the community colleges have been the open access work horses of CUNY, providing the vast majority of community college entrants with remedial coursework. In contrast, many senior colleges have become increasingly selective. Above all, the university has emphasized student completion, striving to raise graduation rates through innovative programs such as Accelerated Study in Associate Programs (ASAP) and the New Community College. At least in part, these trends have been driven by the economic and political context CUNY must navigate.

Funding Constraints

A study that examined per-student state expenditures and rates of degree completion found that, "…public investment in higher education plays a crucial role in determining the degrees produced and the supply of college-educated workers to the labor market (Bound & Turner, 2007, p. 877). But in spite of the importance of funding for student access and success, public higher education must operate in a climate of limited funds. State and city appropriations for CUNY declined while tuition rose during the 1990s. The university engaged in retrenchment and offered early retirement incentives for faculty. Between 1990 and 1995 the number of full-time faculty declined 16.4 percent. Faculty salaries also declined and the use of part-time faculty increased (Gill, 2000).

In more recent years the funding dynamic has not improved substantially. The New York State Commission on Higher Education, established by Executive Order in 2007, released a final report in 2008 that cited a significant lack of public funding for institutions of higher education.

The Commission found that compared to public institutions in peer states[4], public colleges in New York have significantly less operating revenue. In 2004-05, just 4.6 percent of state and local tax revenues and lottery profits in New York were appropriated for higher education (New York State Education Department, 2009). Compared to New York, just seven states allocated a lower proportion of tax and lottery revenues to higher education (New York State Education Department, 2009). The result is that there is less money to hire faculty and for other academic program needs. In 2006, just 52 percent of all faculty at New York public senior colleges were full-time, compared to a weighted peer state average of 67 percent (New York State Commission on Higher Education, 2008). Furthermore, community college tuition in New York stands above the national average and is the highest of the peer states (New York State Commission on Higher Education, 2008).

The recent economic recession and state budget shortfalls have created extreme challenges. Between 2008 and 2010, 43 states enacted cuts to higher education, including New York (Johnson, Oliff, & Williams, 2010). Between 2009 and 2012 New York State funding was reduced by $300 million for CUNY senior colleges and by $10.6 million for CUNY community colleges (Goldstein, 2011). In addition, the New York City 2012 preliminary budget included cuts for CUNY community colleges of $21.6 million, including $16 million in reductions for operating support (Goldstein, 2011).

Beginning in FY2012 funding for CUNY became more stable, with additional revenue coming from tuition increases. Chancellor Goldstein championed the "CUNY Compact" for nearly a decade, and in June 2011 the New York State legislature authorized the approach to

[4] The New York State Commission on Higher Education compared New York's system of higher education to the systems in 7 "peer states." Peer states included California, Florida, Illinois, Massachusetts, Ohio, Pennsylvania, and Texas.

public higher education funding (The City University of New York, 2011a). The legislation includes "maintenance of effort," specifying that state funding for CUNY and for the State University of New York (SUNY) will not decrease over a five-year period unless a financial emergency is declared. The legislation also allows for tuition increases up to $300 per year for five years. While state financial aid will increase to compensate for the rise in tuition, those who do not qualify for financial aid, including part-time students and low-income working adults who are considered "independent" for financial aid purposes, will face higher tuition bills.

Students must struggle considerably to cover expenses while attending college. Based on what the average family pays for college after grant aid, low income families pay considerably more as a percentage of their total income compared to middle and higher income families (Lynch, Engle, & Cruz, 2011). There are financial difficulties for students even though New York ranks second nationally in the amount of need-based financial aid provided per student – up to $5,000 per year (Lynch, Engle, & Cruz, 2011). "Net price" data available from the Integrated Postsecondary Education Data System shows that students who receive grant aid, including low-income students who qualify for federal Title IV aid, still have unmet financial need when considering costs for tuition, fees, books, supplies, and living expenses. See Table 3.1.

Table 3.1. Average Net Price for Beginning Postsecondary Students, 2010-11*

	Average net price for students receiving Title IV Federal financial aid, by income level**				
	0 - $30,000	$30,001- $48 ,000	$48,001 - $75,000	$75,001 - $110,000	Over $110,000
Baruch	2,353	4,997	9,065	11,643	12,358
BMCC	5,066	6,817	9,213	11,160	11,547
Bronx	5,688	7,410	9,768	11,427	11,698
Brooklyn	2,094	4,190	8,111	11,234	11,990
City	2,603	4,767	8,449	11,730	12,555
Staten Island	3,735	5,568	9,158	11,937	12,389
Hostos	4,818	6,980	8,952	10,700	11,487
Hunter	2,586	4,763	8,975	11,580	12,387
John Jay	1,484	4,122	8,216	10,765	11,316
Kingsborough	4,194	6,042	8,759	10,723	11,106
LaGuardia	5,070	6,733	9,020	10,560	11,313
Lehman	1,166	3,599	8,221	9,956	11,207
Medgar Evers	4,821	6,905	10,095	12,000	
NYCCT	3,795	5,916	9,318	11,955	12,323
Queens	1,658	4,185	7,783	10,717	11,683
Queensborough	4,266	5,994	8,754	10,543	10,842
York	3,213	5,120	8,683	11,853	12,690

*Average net price is generated by subtracting the average amount of federal, state/local government, or institutional grant or scholarship aid from the total cost of attendance. Total cost of attendance is the sum of published tuition and required fees (lower of in-district or in-state), books and supplies, and the weighted average for room and board and other expenses. Beginning students are those who are entering postsecondary education for the first time.

** Title IV aid to students includes grant aid, work study aid, and loan aid. For those Title IV recipients, net price is reported by income category and includes students who received federal aid even if none of that aid was provided in the form of grants. While Title IV status defines the cohort of student for which the data are reported, the definition of net price remains the same – total cost of attendance minus grant aid.

SOURCE: National Center for Education Statistics, Integrated Postsecondary Education Data System

Political Pressures

As evidenced by the *US News and World Report* rankings, institutions of higher education strive to be viewed as high quality and prestigious. The academic credentials of entering freshmen and the accomplishments of faculty are frequently touted. Much is at stake, as large research grants and private donations go to institutions that garner respect. Institutions of

higher education place much pressure on themselves, yet there is also pressure from sources within government, private funders, and the public at large.

Given our strained economic climate, demands are increasing for institutions of higher education to produce skilled workers. The U.S. Department of Labor (2008) indicates that many of the fastest growing professions will require some college, but not necessarily a four-year degree. Professions such as dental hygienist, veterinary technologist, physical therapist assistant, and environmental engineer require a 2-year degree and have a projected job growth over the next decade in excess of 30 percent. Toward these goals, there are calls for institutions of higher education to improve rates of degree completion. Educators and policymakers observe large numbers of students entering higher education but not completing a degree, yet there is little attention paid to enrollment of particular student groups and little pressure placed on institutions to expand access for underrepresented groups. Although student completion of the degree is vitally important, I argue that we must still work to ensure there is access for those who seek public higher education.

The American Graduation Initiative. In July 2009, President Obama announced a new plan for community colleges. He set a goal of graduating an additional 5 million community college students with associate degrees or certificates by 2020[5] (The White House, 2009). Ultimately, funding was not allocated for the American Graduation Initiative, but the economic

[5] In 2007-08, 750,164 associate degrees and 749,883 certificates were conferred (Snyder & Dillow, 2010). Assuming the rate of associate degrees and certificates awarded remained constant, the total awarded over a 10-year period would be 15,000,470. President Obama's proposal to award an additional 5 million associate degrees or certificates between 2010 and 2020 represents a 33 percent increase.

impetus for the initiative, as well as the accountability mechanisms suggested, shed light on the political and economic dynamics that will continue to exert influence over community colleges.

Much of the rhetoric used to advocate for institutions of higher education describes them as engines of economic advancement. President Obama introduced the American Graduation Initiative in Michigan at Macomb Community College, a state especially hard-hit by the recession. After referencing the nation's 6.5 million job losses, Obama said:

> …the hard truth is, is that some of the jobs that have been lost in the auto industry and elsewhere won't be coming back. They are casualties of a changing economy… And that only underscores the importance of generating new businesses and new industries to replace the ones we've lost, and of preparing our workers to fill the jobs they create. For even before this recession hit, we were faced with an economy that was simply not creating or sustaining enough new, well-paying jobs. (The White House, 2009)

AGI funds were to be used to, "…put colleges and employers together to create programs that match curricula in the classroom with the needs of the boardroom" (The White House, 2009). President Obama also planned for the initiative to help colleges address low rates of degree completion, which are viewed as a hindrance to economic growth. When discussing low rates of degree completion at Macomb, President Obama said, "That's not just a waste of a valuable resource, that's a tragedy for these students… And it's a disaster for our economy" (The White House, 2009).

The Obama administration proposed at least $750,000 per community college grantee, but with strings attached. Those receiving grants would have been expected to make significant changes and improve student performance. The Brookings concept paper that formed the basis of the initiative was critical of the fact that federal funding is based on enrollment rather than

performance (Goldrick-Rab et al., 2009). In tandem with increased federal aid, it was recommended that the federal government develop national postsecondary goals, student-level data systems to track community college performance, and a performance measurement system (Goldrick-Rab et al., 2009).

Although tying federal dollars to performance did not come to fruition as proposed by the American Graduation Initiative, the National Governor's Association has developed state and institutional college graduation benchmarks and suggests that college performance be used to inform state funding decisions (Reindl & Reina, 2011). Such benchmarks are likely to create increased pressure for community colleges to improve graduation rates. In fact, colleges face pressure to improve performance from all angles.

Other pressures to improve performance. The Higher Education Act of 1965, as amended by the Student Right to Know and Campus Security Act of 1990, requires all institutions of higher education that receive federal student financial assistance to report on graduation rates and other measures. Institutions must report a graduation rate based on the percentage of full-time, first-time students who graduate within 150 percent of normal time (within three years for community college students, within six years for senior colleges). Metrics are publicly available and are regularly used to evaluate college performance.

Known as the Performance Management Process (PMP), CUNY's Central Office has developed its own method of evaluating each college within the system. Every year the Chancellor establishes goals for the university for the upcoming academic year, and college presidents develop specific goals for their college aligned with the goals of the university. College reports are submitted to CUNY's Central Office and form the basis for presidential and

executive raises, and allocation of "PMP Incentive Funds" intended for distribution by the college to successful programs, or for faculty development, equipment, professional travel, or instructional costs. PMP objectives for 2012-13 include "increase retention and graduation rates and ensure students make timely progress toward degree completion" and "increase or maintain access and enrollment; facilitate movement of eligible students to and among CUNY campuses" (The City University of New York, 2012b, p.6). However, in terms of data on access the PMP does not include disaggregated enrollment or transfer data by age or race/ethnicity (The City University of New York, 2011b).

National foundations have also pushed for greater performance accountability for community colleges. The Bill and Melinda Gates Foundation and The Lumina Foundation have allocated funding to community colleges to improve performance. In 2009, Lumina donated approximately $7 million to support "Achieving the Dream," a project designed to influence state policy and help improve outcomes for community colleges serving high percentages of low-income and minority students. Achieving the Dream (2008) touts as policy accomplishments an increase in the number of states that have developed measures for tracking student progress or allocated funding for performance incentives for community colleges. The Gates Foundation Postsecondary Success Initiative aims to increase the number of low-income individuals that receive a college degree or certificate by age 26 (Bill & Melinda Gates Foundation, 2010a). Concepts of performance measurement and performance funding are embedded throughout the Gates Initiative (Bill & Melinda Gates Foundation, 2010b). As reported by The New York Times, a representative of the Gates Foundation said, "The job the country needs community colleges to do now (better success) is different from the job needed from them (broader access) when the community college movement began" (Giridharadas, 2012).

In New York, Governor Andrew M. Cuomo's 2013 State of the State address included a proposal to tie community college funding to performance. He particularly singled out the many community college programs that are "workforce programs" such as Associate of Applied Science (AAS) programs, and suggested that each program include an Advisory Committee consisting predominantly of employers that would facilitate recruitment for the program and evaluate program outcomes. Cuomo (2013) said,

> New York State's performance funding will begin rewarding community colleges that focus on careers that are in demand by employers in their region, help students graduate on time with an industry-recognized degree or certificate, and enable students to find or advance in good-paying jobs in their chosen occupation.

Although Cuomo's proposal indicated that performance funds would be in addition to base aid provided by the state, such funds could encourage community colleges to cream students most likely to graduate and obtain employment.

Consequences of the Economic and Political Context

Invariably, institutions of higher education must respond to financial and political demands. These responses may result in untended consequences, such as a narrowing of the institution's mission and a reduced commitment to serving all students.

Skewed perspective. The over-emphasis on particular indicators of college success, especially graduation rates, has led to a narrowing of the mission of higher education. Using a case study design at seven community colleges in the U.S. and Canada, Levin (2000) examined the evolution of the community college mission in the 1990s. Levin found that throughout the

decade community colleges became increasingly globalized, focused on serving the marketplace rather than meeting the individual needs of students. Levin (2000) states, "…in the 1990s, the mission of the community college had less emphasis on education and more on training, less emphasis upon community social needs and more on the economic needs of business and industry, less upon individual development and more upon workforce preparation and retraining" (p.2).

Focusing on the bottom line has led to a simplistic assessment of our higher education system. An analysis should address the many purposes of higher education, including metrics related to both access and performance. However, a 10-state survey that assessed the performance measures currently collected for community colleges found that most states lack sophisticated and nuanced measures (Dougherty, Hare, & Natow, 2009). A report of the College Board National Commission on Community Colleges (2008) stated,

> Most accepted measures of academic productivity do not apply to complex, open-access institutions with multiple missions. The 'drive-through' nature of community colleges – anathema to many in traditional higher education – is nonetheless a significant part of the appeal and immense popularity of community colleges… Universal success here is defined as the expectation that each student will meet his or her goals – enrichment, employment skills, transfer – on a timetable consistent with the student's needs. (pp.9-10)

Analyses of higher education institutions often include data only for full-time students, or for students who began at the college as a first-time student. Students who transfer may be incorrectly counted as dropouts. Further, data is rarely benchmarked to assess how the institution is performing relative to other institutions that serve similar students.

If expected outcomes are unrealistic there may be a loss of respect or overall support for institutions that are "held accountable" and do not succeed. There is little understanding of whether objectives are reasonable, yet accountability systems presuppose that specific outcomes are feasible and that the education system has complete control over outcomes. "The problem is that the schools cannot actually fulfill such high expectations, and when they fail to meet advocates' inflated claims, critics use the failure as evidence that public schools are fundamentally flawed" (McDermott, 2007, p.104).

Eve Tuck's (2009) concept of "damage-centered" research can be applied to the type of analysis engendered by accountability policy. The intent of performance accountability is to document the inadequacies of individual groups and institutions. Pointing to low completion rates, colleges are cast as wastelands of inefficiency and failure, as students who lack academic potential dropout without having gained any benefit from their educational experience. "This kind of research operates with a flawed theory of change: it is often used to leverage reparations or resources for marginalized communities yet simultaneously reinforces and reinscribes a one-dimensional notion of these people as depleted, ruined, and hopeless" (Tuck, 2009).

Attewell and Lavin (2012) criticize the use of particular time periods for determining graduation rates. The federal standard is 150 percent of normal time, equivalent to a three-year rate for community colleges and six-year rate for senior colleges. However, students may complete their degree over a longer time period. Use of a six-year graduation rate especially overstates ethnic differences and leads to the misconception that minority students are high-risk students for admission. Attewell and Lavin (2012) indicate,

> … if we take the 17-college City University of New York system, where there exists 30 years of data, and use the most commonly cited figure that measures graduation within a

> 6-year time frame, we would erroneously classify as "dropouts" 25% of white women who eventually graduated. We'd also measure as dropouts 56% of Black women who our longer data indicate did complete a degree, plus 53% of Hispanic women. (p.96)

Furthermore, evidence suggests that a greater emphasis on performance is not likely to result in improved outcomes for students. An analysis of community colleges participating in the Achieving the Dream initiative found that, although most participating colleges developed a "culture of evidence," there was little change in rates of student persistence or the percentage of students successfully passing developmental coursework (Zachry Rutschow et al., 2011).

Differential impacts. As colleges search for ways to improve performance they might consider the characteristics of students most likely to complete degrees. For example, research has shown that student momentum is important, as students who attend college full-time are more likely to accumulate credits at a steady pace and complete their degree (Attewell, Heil, & Reisel, 2012). Relatedly, there is interest in encouraging more students to attend full-time rather than part-time. In some cases resources have been targeted specifically for full-time students.

Accelerated Study in Associate Programs (ASAP) began at CUNY in 2007 with the goal of ensuring that at least 50 percent of all participants complete an associate degree within three years (Linderman, 2009). The program provides free tuition for financial aid eligible students and funding for other necessities such as books and MetroCards to entering cohorts at each of CUNY's community colleges. Students also benefit from block scheduling, intensive academic supports, advisement, and career counseling. To participate in the program students must be enrolled for at least 12 credits per semester.

The opening of CUNY's New Community College in Fall 2012 represents a second initiative intended to improve completion rates (The City University of New York, 2012c). Designed to help students complete their associate degree within three years, the college offers 6 degree programs requiring full-time enrollment. Students receive extensive support services such as weekly advisement sessions and peer mentoring. The curriculum includes learning communities and the integration of developmental education into credit-bearing coursework that is relevant to the field of study.

These programs represent an excellent opportunity for some students. Facets of these programs, such as financial support and block scheduling, may make it more feasible for students to attend full-time. However, some students, particularly those with work and family obligations, cannot attend college full-time. The full-time attendance requirement may result in an overall participant group that is younger and more traditional. An assessment of ASAP found that participants were, on average, younger than a comparable group of CUNY students who did not participate in ASAP (Linderman, 2009).

Reduced access. Without adequate resources and facing concerns about performance, colleges may not be able or willing to remain openly accessible to all students. Even community colleges, institutions that are considered open-access, are facing constraints and attacks. In 2010, former Mayor of Chicago Richard M. Daley called for an end to open admissions in Chicago's community colleges, arguing that the system should not serve students who are unprepared for college-level work (Spielman, 2010).

In California, a lack of resources led to 140,000 community college students being closed-out of priority classes (Adams, 2010). A survey conducted by the Pearson Foundation

found that 37 percent of community college students were unable to enroll in a class in Fall 2011 because the class was full (Helliker, 2011). The American Association of Community Colleges found that community college enrollment growth slowed between 2009 and 2010, possibly because colleges chose to limit enrollment growth due to funding or facilities constraints (Adams, 2011). According to Lewin (2010), "In some parts of the country, the budget stresses are so serious that the whole concept of community colleges as open-access institutions – where anyone, with any educational background, can enroll at any point in life – is becoming more an aspiration than a reality."

Unfortunately, student demand for educational services increased at the precise moment that colleges were least able to serve them. During the economic downturn there were limited job opportunities and so many people sought higher education. Between 2008 and 2009, the CUNY community colleges experienced a 13 percent increase in total full-time equivalent student enrollment (The City University of New York, Office of Institutional Research and Assessment, 2012b). For the first time, CUNY instituted a waiting list for community college enrollment for Fall 2010 (Lewin, 2010). By June 2010, approximately 2,460 students had applied after the deadline and were placed on a waiting list (The City University of New York, 2010d). In earlier years the community colleges had accepted applications until just before classes began in the fall. Although New York City high school guidance counselors were advised of the admissions deadline, students who were not transitioning directly from high school may have missed the deadline.

The lack of access to higher education is widely perceived. A survey conducted by Public Agenda found that minorities are more likely to believe that access to college is a problem – 67

percent of Hispanic parents and 84 percent of Black parents said that many qualified people do not have access to higher education (Immerwahr & Johnson, 2008).

Demographic shifts at CUNY. Treschan & Mehrotra (2012) examined enrollment trends at CUNY among first-time freshmen between 2001 and 2010, selecting this time period to evaluate shifts prior to and during the economic recession of 2009 and 2010. Treschan and Mehrotra found that during the recession the number of applications to CUNY increased by 19 percent among first-time freshmen, attributing the increased demand for enrollment to a lack of opportunities in the job market and the relative affordability of CUNY compared to other institutions.

Yet as demand for admission increased there were several policy changes that may have contributed to demographic shifts at CUNY (Treschan & Mehrotra, 2012). Even though applications soared, there were enrollment declines at the senior colleges between 2008 and 2010, suggesting that admissions to the senior colleges were more restricted compared to previous years. The practice of admitting students who were not skills proficient on a conditional basis to the senior colleges was ended shortly before the recession struck. Further, CUNY's admission standards, which are based strictly on high school GPA, high school course taking, and SAT scores, were raised. Prior to 2008 senior colleges required a Math SAT score of 480 for admission, while beginning in 2008 students applying to CUNY bachelor's programs needed a score of 500 on the Math SAT, and a score of 510 for admission to one of the top-tier senior colleges (Baruch, Brooklyn, City, Hunter, or Queens).

Treschan & Mehotra (2012) found that compared to 2008, in 2010 the senior colleges enrolled proportionally more students with high SAT scores and fewer Black and Latino

students. While the proportion of Black students was declining at CUNY between 2001 and 2008, the number of Black students was still increasing during this time period as overall student enrollment grew substantially. But between 2008 and 2010, the proportion of Black students dropped sharply and the actual number of enrolled Black students also declined. By 2010 fewer than 10 percent of first-time freshmen in the top-tier senior colleges were Black.

Among Latino students, the proportion increased between 2001 and 2008 at both community and senior colleges, but between 2008 and 2010 the gains among Latino students at the senior colleges evaporated (Treschan & Mehotra, 2012). By 2010 community colleges were enrolling more high achieving students who in previous years would have been admitted to a senior college. In short, there was a "…crowding-out effect, as prospective students are pushed down from top-tier to lower-tier senior colleges, and from lower-tier senior schools to community colleges" (Treschan & Mehotra, 2012, p.16).

Treschan & Mehotra (2012) point out that compared to Baruch and Hunter, top schools in the State University of New York and Rutgers University systems have student populations that are demographically more representative of the surrounding area. While 32 percent of New York City public high school students are Black and 40 percent are Latino, just 23 percent of students enrolled in CUNY senior colleges are Black and 25 percent are Latino. However, Treschan & Mehotra (2012) acknowledge, "This is even more complicated in the CUNY context, where the white and Asian populations are diverse in and of themselves, and have high shares of working class, first-generation, and immigrant young people, many of them from Eastern Europe, South Asia, and China" (p. 20).

CUNY's Office of Institutional Research and Assessment points out that the analysis by Treschan & Mehotra focused solely on first-time freshmen and did not include transfer students

who are often Black or Hispanic. However, even when transfer students are included in the analysis, it is clear that the proportion of Black students at CUNY has declined. Between 2001 and 2010, the percentage of Black undergraduates declined from 23.0 percent to 15.7 percent at the top-tier senior colleges. In other bachelor's programs at CUNY the percentage of Black undergraduates declined from 39.5 percent in 2001 to 32.6 percent in 2010. Open access associate programs also experienced a decline in the enrollment of Black students, from 35.8 percent in 2001 to 32.0 percent in 2010 (The City University of New York, Office of Institutional Research and Assessment, 2012c).

With the inclusion of transfer students, data show that the percentage of Hispanic undergraduates increased slightly at the top tier senior colleges, from 19.7 percent in 2001 to 20.0 percent in 2010. Within other baccalaureate programs the percentage of Hispanic undergraduates increased between 2001 and 2010 from 28.6 percent to 30.7 percent (The City University of New York, Office of Institutional Research and Assessment, 2012c).

The Office further points to improving persistence data, indicating that minority students have benefited from these trends. Among Black and Hispanic first-time freshmen who enrolled in a CUNY baccalaureate program in Fall 2001, 79.3 percent were retained after one year compared to 84.1 percent of those who began at CUNY in Fall 2010 (The City University of New York, Office of Institutional Research and Assessment, 2012c).

Data also show that as student enrollment has risen over the years, the raw numbers of all student groups earning degrees from CUNY has increased. In 2001-02, 2,158 Asian students, 4,055 Black students, 2,727 Hispanic students, and 5,225 White students earned bachelor's degrees from CUNY. In 2010-11, 3,670 Asian students, 4,714 Black students, 4,042 Hispanic students, and 7,620 White students earned baccalaureate degrees (The City University of New

York, Office of Institutional Research and Assessment, 2012c). However, these counts show that the proportion of Black students earning bachelor's degree from CUNY has declined over time. In 2001-02, 28.6 percent of bachelor degree recipients were Black, compared to 23.5 percent in 2010-11.

CUNY's Office of Institutional Research and Assessment (2012c) reports that demographic changes at the top-tier senior colleges relate to increased academic selectivity at these institutions. Between 2001 and 2011 the percentage of freshmen enrolling in one of the highly selective senior colleges (which include Baruch, Brooklyn, City, Hunter, and Queens) with SAT scores of 1200 or higher increased from 14.1 percent to 29.8 percent, while the percentage with SAT scores below 1000 dropped from 39.6 percent to 11.6 percent. OIRA (2012c) reports that, "the rising standards have affected the diversity of the freshman class at CUNY's highly selective senior colleges" (p.3). The acceptance rate for Black students at the top-tier senior colleges fell from 32.3 percent in 2001 to 16.7 percent in 2011. Additionally, among Black students accepted to the top-tier senior colleges, the percentage who opted to attend CUNY fell over this time period from 43.0 percent to 36.1 percent. "Well-prepared black high school graduates are among the most highly recruited students in the nation, and they typically have many options" (The City University of New York, Office of Institutional Research and Assessment, 2012c).

Chapter 4. Access to Higher Education in Context

The following chapter will explore why access to higher education is important for individuals and for our society. Stratification within the higher education system and the variable costs and opportunities associated with different types of higher education will also be reviewed. Finally, challenges related to expanding access for individuals who are low-income, minority, and older than traditional college-going age will be analyzed. These issues bear upon the opportunities available through CUNY, and the factors that might play a role in the underrepresentation of particular groups within CUNY.

Higher Education Access, Is it Important?

Due to low rates of degree completion, policymakers and administrators have begun placing more emphasis on helping matriculated students complete degrees than on opening the doors wider for increased numbers of students. Some claim that expanding access to higher education is an unwise investment because many students will not graduate. According to data from the National Center for Education Statistics, just 20.4 percent of those who entered a public certificate or associate degree program in 2007 had completed the program within three years, including just 11.9 percent of Black students and 16.0 percent of Hispanic students (Aud et al., 2012). Among students who entered an open admissions public bachelor's degree program in 2004, just 28.8 percent had completed the program within six years (Aud et al., 2012).

Degree completion is important. Liu (2012) reports that the average lifetime earnings for someone with a bachelor's degree is approximately $2.5 million, while lifetime earnings for someone with some college experience but no degree is just $1.3 million. Yet we should not discount students who are unlikely to complete degrees in a timely manner. As indicated in

Chapter 3, many more students may be expected to complete degrees over the long run (Attewell & Lavin, 2012). College completion rates do not account for the large numbers of students who transfer to different institutions, or for the many students who drop out and reenroll at a later date. Based on a longitudinal study sponsored by the National Center for Education Statistics, it was found that 90 percent of all traditional-age students who begin college re-enroll for a second year, although many have transferred to a different institution or taken time off between the first and second year (Adelman, 2006). If this is true of traditional-age students, we may assume that it is also true that adult learners are likely to switch institutions or pursue a degree non-continuously as their personal and financial situation allows. Given our complex and fluid system of higher education, it may be inaccurate to judge college attendance or completion patterns based on an examination of a single institution during a short time period.

Furthermore, students who attend college but do not earn a degree still benefit from their higher education experience. Nationally, individuals that attend college but do not earn a degree earn 7 percent more than they would have earned if they did not attend college (Attewell & Lavin, 2007). Economic payoffs are enjoyed by students who were academically weak when they began college. High school graduates with a C average or lower that attended community colleges but did not earn a degree earned between 13 and 15 percent more compared to equally low-performing counterparts that did not attend college (Attewell & Lavin, 2007). As stated by Attewell and Lavin (2007), "…academically weak high school students who do go to college are gaining economically by attending college. It makes no sense to discourage them from continuing to college, and it is incorrect to assert that they are wasting their time there" (pp.165-166).

Barring individuals from attaining higher education may be particularly damaging today. Over the last approximately four decades the chances of earning a decent living without college experience has diminished. According to data from the American Community Survey administered by the U.S. Census Bureau, in 2010 the unemployment rate for adults living in New York City was 9.6 percent, but it was 10.5 percent for those with only a high school diploma and just 6.5 percent for those with a bachelor's degree or higher (Liu, 2012). Examining data on jobs and education requirements in 1973 compared to 2007, Symonds, Schwartz, and Ferguson (2011) concluded that:

> …while the total number of jobs in America had grown by 63 million, the number of jobs held by people with no post-secondary education had actually fallen by some 2 million jobs. Thus, over the past third of a century, all of the net job growth in America has been generated by positions that require at least some post-secondary education. (p.2)

Opportunities in the labor market are extremely limited for young people, and so higher education may be one of the few avenues to a productive and secure life for them. Sum, Khatiwada, and Palma (2010) found that between 2000 and 2010 the employment to population ratio among teens (ages 16 – 19 years old) fell sharply, from 51.4 percent to 28.6 percent. If the employment rate had held steady, almost 4 million more teenagers would have been employed in 2010. Teens from low-income families were less likely to be employed than those from higher income families, and the size of the gap between low-income and higher-income teens was especially pronounced for Black and Hispanic teens. Just 9 percent of low-income Black teens and 15 percent of low-income Hispanic teens were employed in 2010. Young adults ages 20 – 24 also fared poorly in the job market between 2000 and 2010, with their employment to population ratio declining from 74.2 to 62.2 percent over the period.

Earnings are linked to educational attainment. New York City residents with only a high school diploma earned on average $21,441 per year compared to $28,212 for those with some college, $31,768 for those with an associate degree, and $54,904 for those with a bachelor's degree (Liu, 2012). In fact, earnings have declined for those without educational credentials. Between 1974 and 1990 the average income for male high school dropouts declined 16 percent in inflation-corrected dollars and declined almost 2 percent more between 1991 and 2003 (Attewell & Lavin, 2007). Barrow & Rouse (2006) find that the return of education on earnings is constant across all racial and ethnic groups.

Although data on the relationship between higher education and earnings is compelling, it is also true that some certificate and associate degree programs are more economically rewarding than some bachelor's programs. For example, some jobs that require just a certificate or associate degree, such as dental hygienist, pay good wages. Approximately 27 percent of people with a certificate or associate degree earn more than the average bachelor's degree holder (Symonds, Schwartz, & Ferguson, 2011).

There are many other personal benefits associated with obtaining higher education. For instance, individuals' personal earnings will benefit their children and other family members, making it likely that future generations will be more advantaged and likely to experience success (Attewell & Lavin, 2007). Obtaining higher levels of education also has a positive impact on health, as individuals with higher levels of education make better health decisions and have better health outcomes (Cutler & Lleras-Muney, 2006). Evidence from interviews with 102 students who enrolled at CUNY's LaGuardia Community College in Fall 1995 and left prior to obtaining a degree showed that 94 percent said they benefited in some way from attending,

including 20 percent who said they were prepared for further study and 15 percent who said they had discovered new interests (Gittell & Steffy, 2000).

Providing higher education benefits society, as well as individuals. Individuals with higher education pay more taxes, are less likely to utilize Medicaid or other welfare programs, and are less likely to become involved with the criminal justice system (Levin, Belfield, Muennig, & Rouse, 2007). Additionally, a well-functioning economy requires skilled workers. The Bureau of Labor Statistics (2012) projects that jobs requiring at least some college experience will grow more rapidly over the next decade than jobs that require just a high school diploma or less. The 2009 Economic Report of the President indicates that improvement in overall educational attainment is credited with one-third of the increase in American productivity between the 1950s and 1990s (Council of Economic Advisors, 2009). According to Shapiro (2006), one of the best indicators of future economic growth is a city's level of human capital.

Stratification within the Higher Education System

In Fall 2010, approximately 40 percent of all students in higher education attended public 2-year colleges, 36 percent attended public 4-year colleges, 15 percent attended private, non-profit colleges, and 10 percent attended for-profit colleges (Aud et al., 2012). The level (2-year versus 4-year) and sector (public, private, or for-profit) of higher education attended is related to socioeconomic status. For instance, 10 percent of all students but 18 percent of Black students attended for-profit colleges, and 40 percent of all students but 51 percent of Hispanic students attended public 2-year colleges (Aud et al., 2012). Community colleges enroll higher proportions of students who are low-income, Black, Hispanic, and older compared to public 4-year colleges,

and for-profit colleges enroll higher proportions of such students compared to both community colleges and public 4-year colleges (Staklis, Bersudskaya, & Horn, 2011).

At CUNY, in Fall 2011, 66 percent of community college students were Black or Hispanic, 65 percent received Pell grants, 44 percent spoke a native language other than English, 48 percent were the first generation to attend college, 41 percent attended part-time, and 46 percent had a total annual household income under $20,000 (The City University of New York, Office of Institutional Research and Assessment, 2012d). On each of these indicators, students enrolled in CUNY senior colleges were more advantaged (The City University of New York, Office of Institutional Research and Assessment, 2012d).

For-profit colleges intentionally seek out low-income students because these populations are eligible for federal student aid. According to an analysis of for-profit colleges released by the U.S. Senate Health, Education, Labor and Pensions Committee in July 2012, "…at some for-profit colleges, admissions representatives were trained to locate and push on the pain in students' lives" (p.4). In 2009-10 the for-profit sector received 25 percent of all federal student financial aid, and for-profit institutions received on average 86 percent of their total revenue from federal student aid (U.S. Senate Health, Education, Labor and Pensions Committee, 2012). The 90-10 rule requires that colleges receive no more than 90 percent of their revenue from federal student aid programs. Since Department of Defense and Veterans Affairs educational benefits are separate from Title IV federal student aid, funds received from these sources technically do not count as federal aid for purposes of the 90-10 rule. As a result, for-profit colleges have aggressively recruited veterans.

For-profit colleges are also more likely to enroll students who are older than traditional college-going age. The average age of beginning students at public four-year colleges in Fall

2003 was 19.1 compared to 24.8 at for-profit four-year colleges (Swail, 2009, p.13). The average age was more similar at two-year colleges – 23.7 at public colleges and 24.4 at for-profit colleges (Swail, 2009, p.13). It is estimated that the for-profit sector will enroll 42 percent of all adult learners in higher education by 2019 (Truong, 2010).

Research suggests that our higher education system has become increasingly stratified over time. Bailey and Dynarski (2011) studied college enrollment and completion among students born in the early 1960s and also among students born around 1980. Among those born in the early 1960s, just 19 percent of those from the bottom quartile of the income distribution enrolled in college, compared to 58 percent of those from the top income quartile, a gap of 39 points. But among those born approximately 20 years later, the gap had expanded to 51 points, with 29 percent of students from the bottom income quartile enrolling in college compared to 80 percent of those from the top income quartile.

Further, Bailey and Dynarski (2011) found that gaps between low and high income students in college completion have also widened substantially. Among those from the bottom income quartile, just 5 percent of those born in the early 1960s completed college and just 9 percent of those born around 1980 completed college. In comparison, among those from the top income quartile, 36 percent of those born in the early 1960s and 54 percent of those born around 1980 completed college.

Variable Costs and Opportunities

Stratification within the higher education system is a matter of concern because costs and opportunities may vary depending on the type of institution a student attends and graduates from. In terms of costs, public colleges are the most affordable option for students, with yearly tuition

and fees costing an average of $2,794 at public 2-year colleges and $7,294 at public 4-year colleges (Aud et al., 2012). In Fall 2012, tuition at CUNY senior colleges was $5,430 and tuition at CUNY community colleges was $3,900 (CUNY, 2013). Tuition and fees are significantly more expensive at private non-profit and for-profit colleges. For instance, average tuition and fees at for-profit 2-year colleges are approximately 5.5 times more expensive than at public 2-year colleges (Aud et al., 2012).

Higher tuition costs saddle students with serious financial burden. Among students with family incomes between $0 and $30,000, after financial aid was accounted for the average annual "net price" (including costs for tuition, fees, books, supplies, transportation, and living expenses) was $5,480 at public 2-year colleges compared to $24,130 at for-profit 2-year colleges (Aud et al., 2012).

Costs incurred by the many low-income and minority students who attend for-profit colleges are a particular matter of concern. Ninety-six percent of students who attend for-profit colleges borrow money to cover their expenses, in comparison to 13 percent at community colleges and 48 percent at 4-year public colleges (U.S. Senate Health, Education, Labor and Pensions Committee, 2012). In 2005-06, the average federal loan amount after four years for students attending for-profit colleges in New York was $43,880, compared to an average loan amount of $3,212 for students attending CUNY (New York State Education Department, 2009). Meanwhile, publicly traded companies that operate for-profit colleges paid their CEO's an average of approximately $7.3 million in 2009 (U.S. Senate Health, Education, Labor and Pensions Committee, 2012). In fact, an analysis of internal company documents revealed that tuition increases at for-profit colleges are undertaken to insure profit margins and have little

relationship to instructional expenses (U.S. Senate Health, Education, Labor and Pensions Committee, 2012).

For-profit colleges have been criticized for using aggressive marketing tactics to attract students who quickly become indebted, and ultimately leave the institution without a degree or good prospects for employment. An analysis released by the U.S. Government Accountability Office in August 2010 found that for-profit colleges frequently engaged in fraudulent and deceptive practices. For instance, for-profit colleges encouraged applicants to falsify information on financial aid forms and provided inaccurate information about program costs (U.S. Government Accountability Office, 2010). Approximately 22 percent of students who attended for-profit colleges and received federal student loans defaulted on those loans within three years of entering repayment (U.S. Senate Health, Education, Labor and Pensions Committee, 2012).

Aside from the costs associated with attending different types of institutions, educational opportunities also vary. Importantly, the likelihood of completing a degree varies substantially by sector and level. Among full-time, first-time freshmen, public institutions have an average graduation rate of 56 percent, compared to 65 percent among private, non-profit institutions and just 28 percent among for-profit institutions (Aud et al., 2012). These graduation rates are based on 150 percent of normal time, or 6 years for bachelor's programs and 3 years for associate programs.

Looking specifically at 2-year institutions, for-profit colleges appear to have a graduation rate that is higher than at public colleges - 60 percent at for-profit institutions versus 20 percent at public institutions (Aud et al., 2012). However, 2-year institutions enroll many students who are not full-time, first-time students and therefore are not captured in the federal data. The U.S. Senate Health, Education, Labor and Pensions Committee (2012) analyzed the academic records

of students who enrolled in for-profit colleges in 2008-09 and found that 63 percent of all students who enrolled in associate programs withdrew within two years before earning a degree, and withdrawal rates were much higher for students enrolled in online programs operated by for-profit colleges (U.S. Senate Health, Education, Labor and Pensions Committee, 2012).

Within the public sector there has been much debate over whether community colleges increase or constrain educational opportunities. Supporters point out that community colleges, because of their open access admission standards, expand opportunities for people that otherwise would not be able to attend college. In contrast, 4-year colleges often have admissions requirements that preclude students with poor academic preparation from enrolling. Brint and Karabel (1989) maintain that "the two-year public community college…through its very accessibility, reinforces the American ideology that it is never too late for individual talent to reveal itself – and to be rewarded" (p. 725).

However, requiring that students begin in a community college presents a barrier for some students. More than 80 percent of first-time students who begin in a community college aspire to earn a bachelor's degree (Horn & Skomsvold, 2012). Yet students who begin at a community college are less likely to earn a bachelor's degree compared to students who begin at a senior college, even controlling for student characteristics (Alfonso, 2006; Doyle, 2009). This happens when community colleges divert students from senior colleges, thereby reducing the chance that they will ultimately achieve a bachelor's degree. Students who begin in a community college with the goal of transferring to a bachelor's degree program must negotiate multiple bureaucracies and college cultures, and may lose academic credits in the transfer process.

The quality of education received may also vary depending on the type of institution attended. For-profit institutions are criticized for being operated as a business, with little faculty

oversight for academic quality and rigor (Wilson, 2010). Approximately 80 percent of all faculty at for-profit institutions are part-time employees (U.S. Senate Health, Education, Labor and Pensions Committee, 2012). The substantial reliance on part-time faculty calls into question the ability of faculty to exercise academic freedom, to participate in academic governance, or to meaningfully engage in the life of the college. Furthermore, for-profit institutions allocate only approximately 17 percent of all resources for instruction, while they allocate much more for marketing, recruiting, admissions, and profit (U.S. Senate Health, Education, Labor and Pensions Committee, 2012).

Recent research suggests that students who earn credentials from for-profit institutions are not rewarded in the labor market. Comparing associate degree holders from public, private, and for-profit institutions, Lang and Weinstein (2012) found that those with a degree from for-profit institutions did not experience salary gains, while other students did increase their earnings after obtaining the degree. The study controlled for differences in student characteristics and found statistically significant impacts.

Access for Low-Income, Minority, and Adult Students

Increasing the proportion of Americans with higher education is recognized as a top priority. President Obama has proposed that all Americans commit to at least one year of postsecondary education. Yet we are far from meeting this goal. Out of 100 students entering a New York City high school, just 48 percent graduate from high school and enroll in college, and just 21 percent successfully graduate from college with an associate or bachelor's degree (Liu, 2012).

Related to the fact that there are many high school students who do not successfully transition to or through higher education, there is a large pool of adults that have not obtained higher education. Increasing the number of adults enrolled in higher education is a key workforce development strategy. In 2008, more than two-thirds of adults had not yet obtained their bachelor's degree, and about one-third had not obtained any higher education (Aud, Fox, & KewalRamani, 2010). According to the 2000 Census, there were approximately 1.8 million adults ages 25-49 in New York with a high school diploma but no college experience, representing a far larger pool of college eligible individuals compared to recent high school graduates (Hilliard, 2007).

When the economy experiences a downturn adults are especially likely to pursue higher education in order to advance their skills and qualify for additional job opportunities (Pusser et al., 2007). Notably, Black and Hispanic adults are less likely to have obtained higher education. While 29 percent of all adults have a bachelor's degree, just 13 percent of Hispanics and 20 percent of Blacks have a bachelor's (Aud et al., 2010). Adults enrolled in higher education are more likely to be female, Black, attend part-time, and to have parents with lower levels of education (Wei, Nevill & Berkner, 2005).

Although expanding college access and completion is in our best interest, there are many associated challenges, especially for adult students who are likely to face particular challenges as they attempt to balance education with their need to work and support their families. In a study of independent undergraduate students[6], it was found that 58 percent were employed full-time

[6] For federal financial aid, independent students are defined as age 24 or older, or students that have other characteristics such as being married or having children. In New York State, students who are younger than age 22 are automatically considered "dependent," while those age 35 and older are automatically considered "independent." Students who are between ages 22 and 34 will be classified as independent if they do not live with their parents, are

while attending college and 53 percent had children (Wei, Nevill, & Berkner, 2005). Undergraduates who reported that employment was their primary activity were less likely to complete a degree within six years compared to undergraduates who viewed themselves primarily as a student (Berker & Horn, 2003).

The requirement that students demonstrate proficiency in reading, writing, and mathematics represents another barrier for disadvantaged students seeking higher education. Nationally, approximately 58 percent of all community college students take at least one remedial course (Attewell & Lavin, 2007). However, students' chances of being placed in developmental education vary widely by institution (Bettinger & Long, 2004). At CUNY, students who do not demonstrate proficiency through SAT scores, Regents exam scores, or by passing CUNY Assessment Tests must begin at a community college. For entering cohorts between 2004 and 2008, 82 percent of all incoming community college students at CUNY were referred for remediation, including 64 percent in math, 56 percent in writing, and 24 percent in reading (Jaggars & Hodara, 2011).

One view is that remedial coursework represents a type of tracking designed to prevent unprepared students from enrolling in credited coursework. Another view is that remediation is essential so that students gain the skills they need to be successful. Many students are confused or angry when they learn that they must complete costly remedial coursework that does not advance them toward their degree (Venezia, Bracco, & Nodine, 2010). Another problem is that placement exams used to determine which students require remediation are only weakly predictive of student success (Hughes & Scott-Clayton, 2011). Based on study of Virginia

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not claimed as a dependent on their parents' taxes, and do not receive more than $750 from their parents. For more detail, see http://www.cuny.edu/admissions/financial-aid/student-eligibility/dependent-independent.html.

community colleges, students who were referred for developmental education but skipped directly into college level math or English were just as likely to succeed in the course, to earn their degree, and to transfer compared to students who took the developmental courses (Jenkins, Jaggars, Roksa, Zeidenberg, & Cho, 2009).

Bettinger and Long (2004) found that students placed in remediation were more likely to dropout or transfer to less selective institutions compared to similar students not placed in remediation. A study of CUNY students enrolled in remedial coursework found that many of these students do not successfully complete remediation and advance toward their degree. Tracking students placed in a remedial math course, it was found that only 18 percent had completed remediation and passed the entry level credit-bearing math course after two years; and of those placed in a remedial writing course, just 37 percent had completed remediation and passed the entry level credit-bearing English course after two years (Jaggars & Hodara, 2011).

The availability of financial aid represents another serious barrier for disadvantaged students. Baum (2007) reports that, "the gap between family and student ability to pay and the price of college continues to grow" (p.15). Increasingly, financial aid has been provided through tax deductions that often do not benefit low-income students, and the financial aid that is available is offered through a confusing array of public and private sources that may be difficult to navigate (Baum, 2007). The federal Pell Grant Program provides grants to needy students, but recent restrictions in the program have made it more difficult to receive aid. In 2012 legislation was passed that lowered the income threshold to just $23,000 for students to qualify for the maximum amount of federal financial aid, the number of years a student may receive a Pell grant was reduced from 9 years to just 6 years, and aid for the Summer term was eliminated (U.S. Department of Education, 2013). Evidence suggests that the reduction in Pell grant eligibility has

led to enrollment declines at community colleges in Mississippi and Philadelphia (Lane, 2013; Snyder, 2013).

In New York State, aid is available through the Tuition Assistance Program (TAP). TAP funding is limited to a total of 6 semesters of full-time enrollment in a community college, and to a maximum total of 8 semesters of full-time enrollment for a students' entire undergraduate experience. Remedial coursework counts against the TAP limit and so many students exhaust their available TAP before earning a degree. Another issue is that the availability of TAP for students attending part-time is extremely limited. Students may only receive part-time TAP if they have completed 12 credits in each of the two preceding semesters with a minimum GPA of 2.0. Another serious limitation is that independent students who are not married and do not have children may earn a maximum of just $10,000 in order to qualify for aid. TAP funding is further restricted in that students must maintain "satisfactory academic progress." For example, students must accumulate an adequate number of academic credits each semester.

The limitations of the TAP program are especially difficult for students without adequate academic preparation who must use TAP eligibility to cover the cost of remedial coursework, and also for adult students who must attend full-time and must have an extremely low income to receive TAP. The financial aid rules in New York may be a factor in the decline of adult undergraduates. Between 1995 and 2005 there was a 24 percent increase in the number of undergraduates age 18-24 in New York, but a 20 percent decrease in the number of older students enrolled (Hilliard, 2007). Among all states, New York ranks 43rd in the percentage of adults enrolled in higher education (Hilliard, 2007).

Chapter 5. Methodology

This study examines undergraduate enrollment patterns using three main data sources: The City University of New York Institutional Research Database (IRDB), the National Center for Education Statistics Integrated Postsecondary Education Data System (IPEDS), and the CUNY Admissions System (CAS). Demographic data for New York City residents and high school graduates was also reviewed.

CUNY Institutional Research Database (IRDB)

The IRDB includes individual student-level records for all students enrolled in credited coursework at CUNY institutions. Enrollment patterns at CUNY have been analyzed over a 20-year period, from 1990 to 2010. Fall enrollment records from the following years were included in the analysis: 1990, 1992, 1994, 1996, 1998, 2000, 2002, 2004, 2005, 2006, 2007, 2008, 2009, 2010. The analyzed data file included approximately 2,700,000 student records. These records represent the entire universe of undergraduate students, including first-time freshmen, transfer students, and continuing students. Data is examined for senior, comprehensive, and community colleges, and also for each individual CUNY institution.

The following characteristics of enrolled undergraduates were included in the analysis: age, race/ethnicity, and full or part-time attendance status. Age is based on the student's age at the time of enrollment. In cases where a student did not report their race/ethnicity, the data was imputed by the CUNY Office of Institutional Research and Assessment (OIRA).

Fall enrollment totals presented in this dissertation vary slightly from data published by OIRA. If a student enrolled in multiple CUNY institutions OIRA only counts the enrollment at the student's home college. Through the "e-permit" system, students may be given permission to

take a course at another CUNY college. In such a case, the student has an enrollment record at each college. The analysis presented in this dissertation is based on raw enrollment counts at each institution, and so such a student would be counted twice.

Integrated Postsecondary Education Data System (IPEDS)

To compare undergraduate enrollment patterns at CUNY to enrollment patterns within New York State and nationally, data was obtained from the Integrated Postsecondary Education Data System (IPEDS). IPEDS, sponsored by the National Center for Education Statistics, obtains detailed information from every institution of higher education that receives money from federal student aid programs. IPEDS data allows for an analysis by level and sector, to determine if fluctuation in the enrollment of particular student groups has varied for 2-year versus 4-year colleges, and across the public, private (not-for-profit), or for-profit sectors.

Data were downloaded from the IPEDS Data Center and include all degree granting postsecondary institutions in the United States. IPEDS enrollment data includes all enrolled undergraduates, including both degree and non-degree seeking students. Data comes from the IPEDS 2009 Universe Survey and includes only those institutions that existed in 2009. Institutions that closed prior to 2009 are not reflected in this dissertation. As a result, IPEDS data may differ slightly from NCES published data. A total of 4,573 institutions are included in the analysis.

CUNY Admissions System (CAS)

Student-level records for all first-time freshmen who applied to CUNY for the fall semester between 1990 and 2010 have been analyzed. Records for all years 1990 to 2010, except

2009, were included in the analysis. The combined data file includes approximately 1,021,000 applicant records.

Examining the CUNY Admissions System (CAS) allows for a better understanding of shifting demand for admission to CUNY, and the process of allocating students to particular colleges based on academic qualifications. Records were analyzed by applicant age and race/ethnicity. Other variables included in the analysis were: first choice college, college of allocation, College Admissions Average (CAA)[7], total SAT score, and total academic credits accumulated during high school.

Other Data Sources

As the majority of CUNY students reside in New York City and graduated from New York City high schools, it is important to understand demographic change at CUNY in relation to demographic change in the city and among high school graduates. U.S. Census data for the five counties of New York City were downloaded from American FactFinder, a U.S. Census Bureau information website: http://factfinder2.census.gov. Demographic data by age and by race/ethnicity were available.

Total counts of New York City high school graduates and counts of graduates by race/ethnicity were available from the New York State Education Department, Office of Research and Information Services (ORIS). Data were compiled by ORIS in December 2008

[7] CAA is calculated as the average of grades received in all high school courses designated as college preparatory, which include courses in English, Math, Social Sciences, Science, Foreign Language, and Fine Arts. Not all courses in core academic subjects are considered college preparatory. To determine whether a course is college preparatory, the University Application Processing Center (UAPC) looks at the course content, whether students in the course took an associated Regents exam, and percentages passing the Regents exam.

and included data for years 2004 – 2010, including estimates for 2008 and projections for 2009 and 2010. As of January 2013 updated information was not available. Data were downloaded from: http://www.highered.nysed.gov/oris/counts/projections/.

It should be noted that New York City high school graduation data were not readily accessible. Although the publicly available Common Core Data (CCD) database from the National Center for Education Statistics includes the number of diploma recipients for each county in the United States, data for counties in New York City were not available from this source. Furthermore, the school report card database available from the New York State Education Department includes counts of graduates for each school, but historical data were not available and counts by race/ethnicity were also not available.

Research Questions

The following chart displays the research questions that will be explored, as well as the time period of the analysis, data source, and dissertation chapter where findings are described.

Table 5.1. Research Questions and Data Sources

Research Question	Time period	Source	Chapter
Has enrollment growth at CUNY been concentrated among the community, comprehensive, or senior colleges, or at particular institutions?	1990 – 2010	IRDB	6
Have some undergraduate student groups experienced more enrollment growth at CUNY compared to other student groups; and how has enrollment growth of particular student groups differed at the senior, comprehensive, and community colleges?	1990 – 2010	IRDB	6

Research Question	Time period	Source	Chapter
Has the distribution of undergraduates changed by age, race/ethnicity, and full-time/part-time status; and how has the distribution of undergraduates changed at the senior, comprehensive, and community colleges?	1990 – 2010	IRDB	6
How has enrollment growth and the distribution of particular student groups evolved at each college?	1990 – 2010	IRDB	6
How does demographic change at CUNY relate to demographic change among residents of New York City?	2000 – 2010	IRDB, U.S. Census Bureau	7
How does demographic change at CUNY relate to demographic change among New York City high school graduates?	2004 – 2010	IRDB, New York State Education Department	7
How do undergraduate enrollment patterns at CUNY resemble those within New York State and nationally? How do undergraduate enrollment patterns at CUNY resemble those at other public, private (not for-profit), and for-profit institutions, and other 4-year and 2-year institutions?	1991 – 2009 1993 – 2009 (analyses including age variable) 1995 – 2009 (analyses including race/ethnicity variable)	IPEDS	7
Is demographic change at CUNY related to the growing for-profit sector?	1995 – 2009	IPEDS	7

Research Question	Time period	Source	Chapter
What have been the trends among first-time freshmen applying to CUNY? Have applicants from particular groups increased or decreased? Have applicants to the senior, comprehensive, or community colleges increased or decreased?	1990 – 2010	CAS	8
Are particular student groups more likely to be offered admission to their first choice college? Are particular student groups more likely to be offered admission to a community college versus a senior or comprehensive college?	1990 – 2010 1990 – 2008 (analyses including race/ethnicity variable)	CAS	8
How have the academic credentials of first-time freshmen applicants changed over time, and how have the academic credentials of admitted students at each college changed over time?	1990 – 2010 1990 – 2008 (analyses including race/ethnicity variable)	CAS	8

Limitations of the Analysis

This research has several limitations. First, the research presented here does not isolate the effects of particular factors on demographic change at CUNY. Instead, a variety of factors that may be related to enrollment changes at CUNY are explored, including external factors such as changing demographics of New York City's population, and internal factors such as increased requirements for admission to the CUNY senior colleges.

The publicly available Census data do not allow for a detailed analysis for groups with particular age, race/ethnicity, and educational attainment characteristics. For example, it would be helpful to explore whether there has been an increase in the number of Hispanic or Asian residents of traditional college-going age residing in New York City. Another limitation is that

the U.S. Census Bureau reports Hispanic or Latino status separately from race, while CUNY reports combined race/ethnicity categories.

There were also limitations in the analysis of New York City high school graduates. It was not possible to track the educational trajectories of individual students to determine if particular student demographic groups enrolled in CUNY at higher rates than other student groups. Instead, the analysis compares aggregate increases in the number of students graduating from high school with increases at CUNY. The CUNY data includes students who attended private high schools and high schools outside of New York City, and so the comparison is far from perfect. However, we can expect that as certain groups graduate from New York City high schools at higher rates, those seeking admission and enrolling in CUNY may also increase.

Although Chapters 6 and 7 present demographic information for all enrolled undergraduates, including first-time freshmen, transfer students, and continuing students, Chapter 8 presents application data only for first-time freshmen. It is possible that although the number of first-time freshmen applicants of particular groups declined, the number of such students applying to CUNY as transfer students or "readmits"(those who attended the college previously but withdrew) increased or remained stable. Adult students, who may have enrolled previously in higher education, may be especially likely to apply to CUNY as transfer students or readmits.

CAS data does not indicate whether the applicant actually enrolled in CUNY. Particular student groups might be more likely than other student groups not to matriculate. Another problem with the application data is that the unit of analysis is the college – for instance, the college students list as their first choice, and the college of allocation. However, some colleges include both associate and bachelor's programs. A student may have listed a particular college as

his or her first choice and been allocated to that college, but the student might have been granted admission to an associate program instead of a bachelor's program because he or she lacked proficiency in reading, writing, or math and were required to complete remedial coursework at the associate level.

It is also important to note that first-time freshmen application data are missing a substantial number of "direct admit" applications, students who applied for admission directly at the college rather than through the University Application Processing Center. The CUNY Office of Institutional Research and Assessment reports that directly admitted students were especially prevalent at the community colleges, where older students have had a greater presence. Such students would not appear in the CAS data, but would appear as enrollees in the IRDB. Furthermore, the first-time freshmen applicant data does not include non-degree students, although these students would appear as enrollees.

Chapter 6. CUNY's Undergraduate Student Body, 1990 – 2010

The following chapter will examine changing patterns of undergraduate student enrollment at The City University of New York between 1990 and 2010. Particular student groups have experienced more enrollment growth than others. As a result, the distribution of undergraduates in terms of age, race/ethnicity, and part-time status has also been altered. The following research questions will be explored:

1. Has enrollment growth at CUNY been concentrated among the community, comprehensive, or senior colleges, or at particular institutions?
2. Have some undergraduate student groups experienced more enrollment growth at CUNY compared to other student groups; and how has enrollment growth of particular student groups differed at the senior, comprehensive, and community colleges?
3. Has the distribution of undergraduates changed by age, race/ethnicity, and full-time/part-time status; and how has the distribution of undergraduates changed at the senior, comprehensive, and community colleges?
4. How has enrollment growth and the distribution of particular student groups evolved at each college?

Key Findings

- Most undergraduate enrollment growth has occurred at the community and comprehensive colleges. In 1990 there were almost 20,000 more students enrolled in senior colleges compared to community colleges, yet by 2010 community college enrollments outnumbered senior college enrollments.

- University-wide, between 1990 and 2010 students age 25 and younger increased 63.0 percent while the number of older students decreased 6.9 percent. The number of older students remained stable at the community colleges, but declined 12.5 percent at the senior colleges and 7.1 percent at the comprehensive colleges.
- Over the 20-year period, Asian students increased 125.3 percent, Hispanic students increased 74.5 percent, Black students increased 10.2 percent, and White students declined 2.8 percent. The number of Black students declined 15.3 percent at the senior colleges over the 20-year period.
- Across the university full-time students have increased 53.2 percent while part-time students have increased only 4.3 percent. Part-time students increased 29.9 percent at the community colleges, but decreased 1.8 percent at the comprehensive colleges and decreased 14.7 percent at the senior colleges.
- Between 1990 and 2000, when enrollment declined at the university by 2.7 percent, older White students fared the worst, with both older White men and older White women experiencing more than a 25 percent drop in enrollment. Between 2000 and 2010, enrollment of older Black women declined at all types of CUNY institutions, particularly at the senior colleges. Older Black men experienced large enrollment declines at the senior colleges between 2000 and 2010, but enrollment of this group increased at the comprehensive and community colleges.
- As the enrollment of some student groups has outpaced growth of other student groups, the distribution of undergraduates has changed in terms of age, race/ethnicity, and part-time attendance status. The CUNY student body has shifted to consist of more students of traditional college-going age and fewer older students, with the greatest decline in the

proportion of students age 30 to 44. The CUNY colleges have also become proportionally more full-time, with the change most striking at the comprehensive colleges.

- Compared to earlier student populations, in 2010 a larger proportion of the undergraduate student population was Hispanic or Asian and a smaller proportion was Black or White. The proportion of Black students declined most at the senior colleges, while the proportion of White students declined most at the community colleges. Hispanic students increased their share of enrollment most at the community colleges, while Asian students increased their share most at the senior colleges.
- The number of students age 25 and older declined at 10 colleges. Brooklyn was the only senior college to significantly increase the number of older students enrolled. Three of the six community colleges experienced a decline in the number of older students.
- Between 1990 and 2010 enrollment growth among Asian students outpaced overall enrollment growth at every college except Bronx. Six colleges had fewer Black students enrolled in 2010 compared to 1990, including: Baruch, BMCC, City, Hunter, NYCCT, and Queens. The number of Hispanic undergraduates increased more rapidly compared to overall enrollment growth at all colleges except Baruch, Hunter, and Hostos.

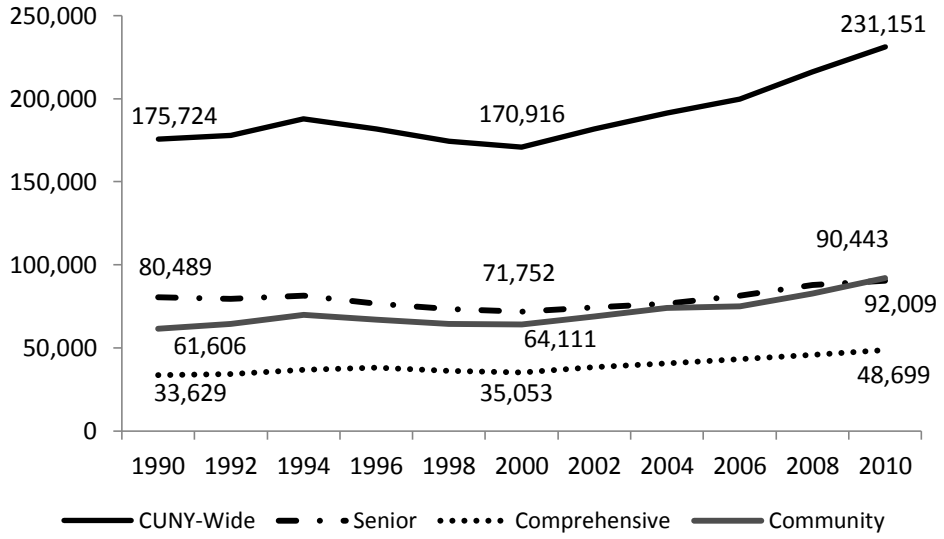
Student Enrollment Growth

Overall student enrollment growth, by level. Over the 20-year period there was a 31.5 percent increase in undergraduate student enrollment CUNY-wide (from 175,724 to 231,151), 49.4 percent increase at the community colleges (from 61,606 to 92,009), 44.8 percent increase

at the comprehensive colleges (from 33,629 to 48,699), and 12.4 percent increase at the senior colleges (from 80,489 to 90,443).

Undergraduate enrollment at CUNY declined 2.7 percent between 1990 and 2000, but then grew 35.2 percent between 2000 and 2010. Between 1990 and 2000 there was modest growth at the community and comprehensive colleges (4.1 percent and 4.2 percent, respectively), while enrollment declined at the senior colleges by 10.9 percent. Between 2000 and 2010 there was a 26.0 percent increase at the senior colleges, while the community colleges grew by 43.5 percent and the comprehensive colleges grew by 38.9 percent. See Figure 6.1.

Figure 6.1. CUNY Undergraduate Enrollment, by Level



Overall student enrollment growth, by college. The amount of enrollment growth has varied widely among the CUNY colleges. Enrollment growth over the 20-year period ranged from just 0.8 percent at Baruch to 94.2 percent at Medgar Evers. Generally, the comprehensive and community colleges expanded much more than the senior colleges. Many colleges

experienced enrollment declines between 1994 and 2000, but all colleges had increasing enrollments after 2000. See Table 6.1.

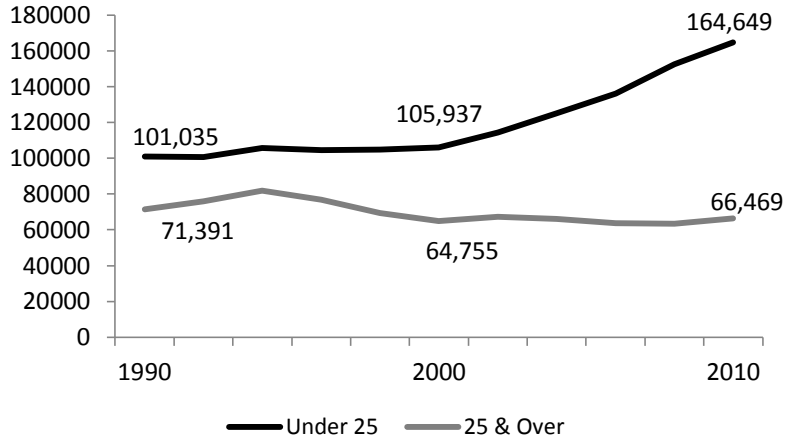
Table 6.1. % Change in CUNY Undergraduate Enrollment, by College, 1990 – 2010

	% Change 1990 - 2000	% Change 2000 - 2010	% Change 1990 - 2010
Senior Colleges			
Baruch	0.4%	0.4%	0.8%
Brooklyn	-15.3%	26.1%	6.8%
City	-26.9%	50.4%	9.9%
Hunter	7.9%	1.3%	9.3%
Lehman	-18.5%	41.7%	15.5%
Queens	-21.4%	44.0%	13.2%
York	-6.3%	45.8%	36.7%
Comprehensive Colleges			
John Jay	18.8%	39.1%	65.3%
Medgar Evers	28.0%	51.7%	94.2%
NYCCT	1.2%	39.5%	41.2%
Staten Island	-11.3%	31.9%	17.0%
Community Colleges			
BMCC	7.8%	40.3%	51.3%
Bronx	7.8%	54.9%	66.9%
Hostos	-27.6%	106.7%	49.6%
Kingsborough	7.7%	25.4%	35.1%
LaGuardia	29.2%	47.5%	90.5%
Queensborough	-13.8%	43.2%	23.4%

SOURCE: CUNY Institutional Research Database

Growth by age. Over the 20-year period students age 25 and younger increased 63.0 percent at CUNY (from 101,035 to 164,649), while the number of older students decreased 6.9 percent (from 71,391 to 66,469). Older students were on the rise between 1990 and 1994, peaking in 1994 at 81,769 enrolled undergraduates age 25 and older, and then declined between 1994 and 2010. In contrast, younger students grew modestly between 1990 and 2000, and then increased at a faster rate between 2000 and 2010. See Figure 6.2.

Figure 6.2. CUNY Undergraduate Enrollment, by Age, Total University



The number of older students has remained stable at the community colleges over the 20-year period. Older students declined at the community colleges between 1994 and 2000, but then grew modestly between 2000 and 2010. In contrast, between 1990 and 2010 older students declined by 12.5 percent at the senior colleges, with this decline occurring throughout the study period. Older students declined 7.1 percent at the comprehensive colleges, with most of this decline occurring between 1994 and 2000.

There have been large increases in the number of younger students. At the community colleges students younger than 25 increased 87.6 percent between 1990 and 2010, while younger students increased 35.8 percent at the senior colleges and 84.0 percent at the comprehensive colleges. See Figures 6.3, 6.4 and 6.5

Figure 6.3. CUNY Undergraduate Enrollment, by Age, Community Colleges

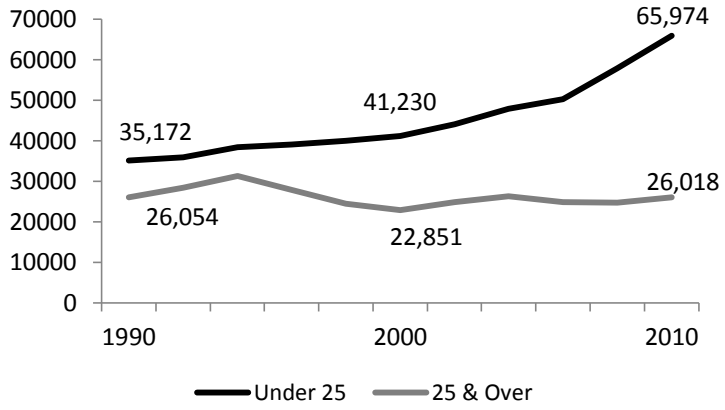


Figure 6.4. CUNY Undergraduate Enrollment, by Age, Comprehensive Colleges

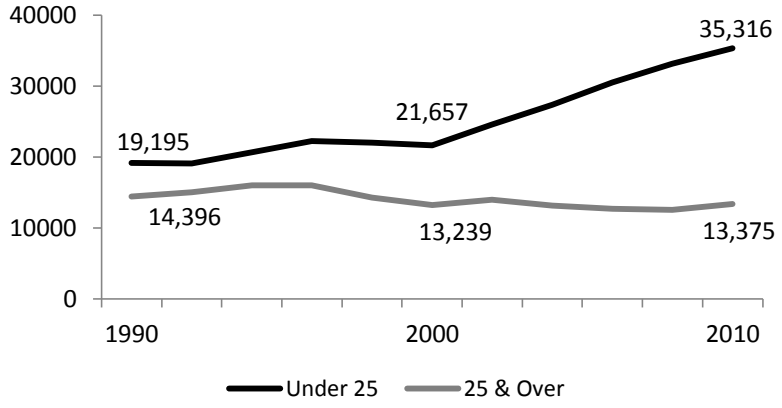
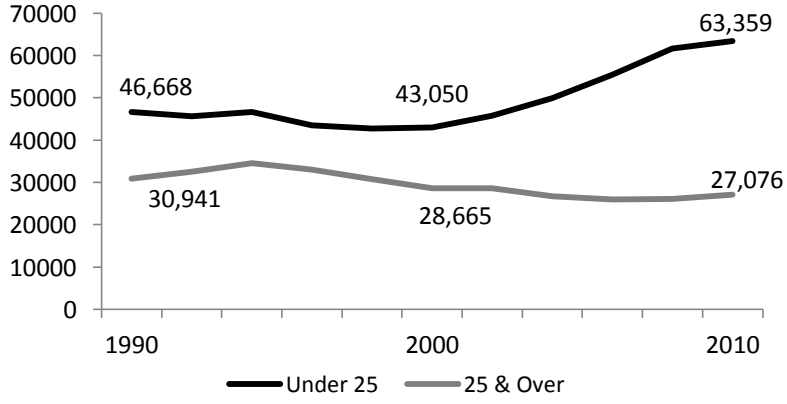


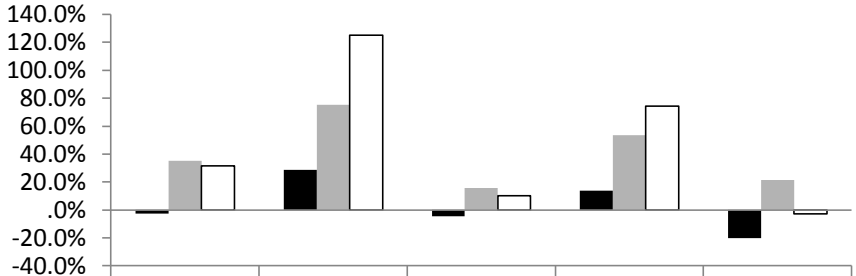
Figure 6.5. CUNY Undergraduate Enrollment, by Age, Senior Colleges



Growth by race/ethnicity. Between 1990 and 2000, the 2.7 percent decline in undergraduate student enrollment at CUNY was concentrated among Black and White students. The number of Black students declined 4.6 percent (from 56,535 to 53,924), and the number of White students declined 20.0 percent (from 62,394 to 49,894). In contrast, Asian students increased 28.6 percent (from 18,126 to 23,304) and Hispanic students increased 13.7 percent (from 38,251 to 43,498).

As CUNY grew by 35.2 percent between 2000 and 2010, most of the growth was among Asian and Hispanic students (75.2 percent and 53.4 percent growth, respectively) while Black students grew by 15.6 percent and White students grew by 21.6 percent. The resulting impact is that during the 20-year period Asian students increased 125.3 percent, Hispanic students increased 74.5 percent, Black students increased 10.2 percent, and White students declined 2.8 percent. See Figure 6.6.

Figure 6.6 % Change in CUNY Undergraduate Enrollment, by Race/Ethnicity, Total University



	All	Asian	Black	Hispanic	White
1990 to 2000	-2.7%	28.6%	-4.6%	13.7%	-20.0%
2000 to 2010	35.2%	75.2%	15.6%	53.4%	21.6%
1990 to 2010	31.5%	125.3%	10.2%	74.5%	-2.8%

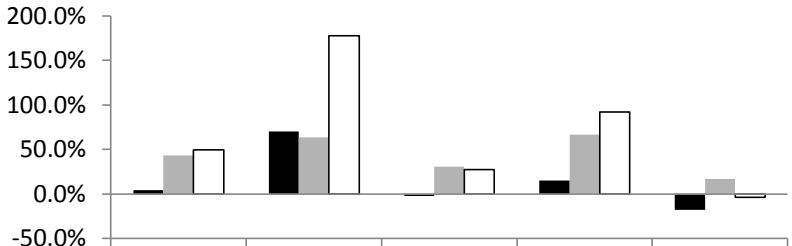
Over the 20-year period growth was most pronounced among Asian and Hispanic students. Although enrollment at the community colleges expanded 49.4 percent, enrollment expanded by 177.9 percent among Asian students (from 5,096 to 14,160) and by 92.3 percent

among Hispanic students (from 17,468 to 33,586). Overall enrollment grew by 12.4 percent at the senior colleges, but by 90.0 percent among Asian students and by 39.1 percent among Hispanic students. Patterns were similar at the comprehensive colleges.

After a small decline in the number of Black students at the community colleges between 1990 and 2000, Black students grew by 30.8 percent between 2000 and 2010, for an overall increase of 27.7 percent over the two decades. Similarly, Black students expanded by 25.2 percent at the comprehensive colleges with most growth occurring after 2000. In contrast, the number of Black students declined 15.3 percent at the senior colleges over the 20-year period. Black students declined at the senior colleges between 1994 and 2004 and then expanded slowly between 2004 and 2009. However, between 2009 and 2010 there was a 4.5 percent decrease bringing the number of Black students at the senior colleges to the lowest point in two decades. It is interesting to note that the number of Hispanic students decreased by 2.1 percent at the senior colleges between 2009 and 2010.

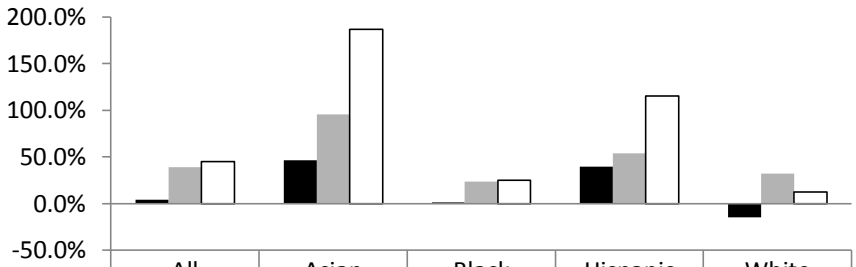
Between 1990 and 2010 White students declined 4.0 percent at the community colleges, increased 12.4 percent at the comprehensive colleges, and declined 8.0 percent at the senior colleges. At the community, comprehensive, and senior colleges enrollment growth among White students declined prior to 2000, and then grew. See Figures 6.7, 6.8, and 6.9.

Figure 6.7 % Change in CUNY Undergraduate Enrollment, by Race/Ethnicity, Community Colleges



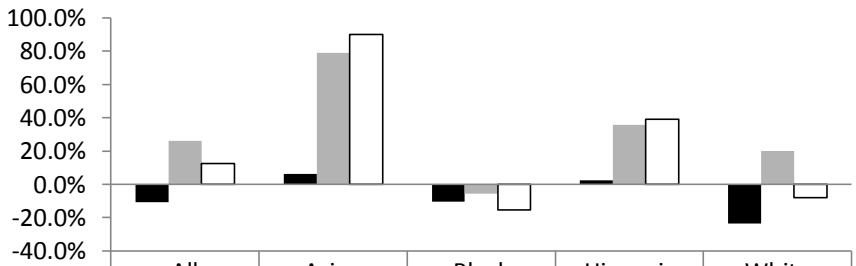
	All	Asian	Black	Hispanic	White
1990 to 2000	4.1%	70.1%	-2.4%	15.2%	-17.7%
2000 to 2010	43.5%	63.4%	30.8%	66.9%	16.6%
1990 to 2010	49.4%	177.9%	27.7%	92.3%	-4.0%

Figure 6.8. % Change in CUNY Undergraduate Enrollment, by Race/Ethnicity, Comprehensive Colleges



	All	Asian	Black	Hispanic	White
1990 to 2000	4.2%	46.6%	1.4%	39.6%	-14.9%
2000 to 2010	38.9%	95.5%	23.5%	54.1%	32.0%
1990 to 2010	44.8%	186.7%	25.2%	115.1%	12.4%

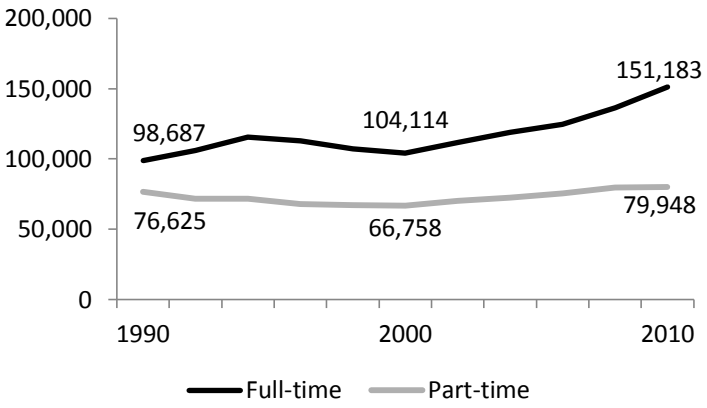
Figure 6.9. % Change in CUNY Undergraduate Enrollment, by Race/Ethnicity, Senior Colleges



	All	Asian	Black	Hispanic	White
1990 to 2000	-10.9%	6.2%	-10.3%	2.5%	-23.4%
2000 to 2010	26.0%	78.9%	-5.5%	35.7%	20.1%
1990 to 2010	12.4%	90.0%	-15.3%	39.1%	-8.0%

Growth by full-time/part-time status. The undergraduate student body has also changed in terms of the number of students attending full-time. Across the CUNY system, the number of undergraduates attending full-time increased 53.2 percent since 1990 (from 96,687 to 151,183), with most of the growth in full-time students occurring since 2000. Part-time students increased just 4.3 percent over the period. Part-time students declined by 12.9 percent between 1990 and 2000, and then increased 19.8 percent between 2000 and 2010. See Figure 6.10.

Figure 6.10. CUNY Undergraduate Enrollment, by Full-Time/Part-Time Status, Total University



At the community colleges, part-time students declined 5.6 percent between 1990 and 2000, and then grew 37.5 percent between 2000 and 2010, for a cumulative growth over the 20-year period of 29.9 percent. In contrast, at the comprehensive and senior colleges there were fewer part-time students enrolled in 2010 than in 1990. Part-time students declined 19.5 percent between 1990 and 2000 at the comprehensive colleges, but then grew by 22.0 percent between 2000 and 2010. At the senior colleges, part-time students declined 16.0 percent between 1990 and 2000, and grew only 1.6 percent between 2000 and 2010. In contrast, there was much more enrollment growth among full-time students. See Figures 6.11, 6.12, 6.13.

Figure 6.11. CUNY Undergraduate Enrollment, by Full-Time/Part-Time Status, Community Colleges

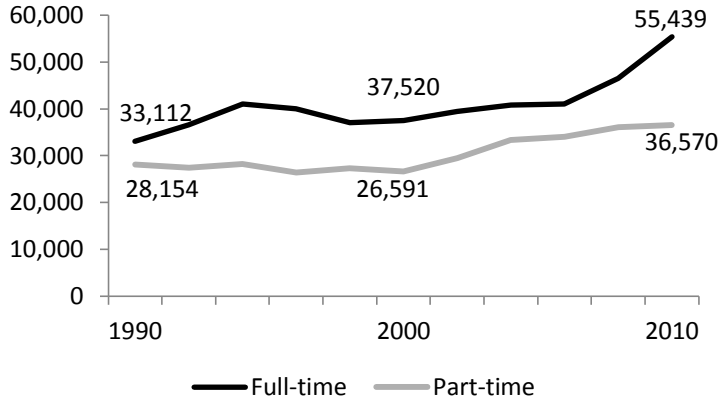


Figure 6.12. CUNY Undergraduate Enrollment, by Full-Time/Part-Time Status, Comprehensive Colleges

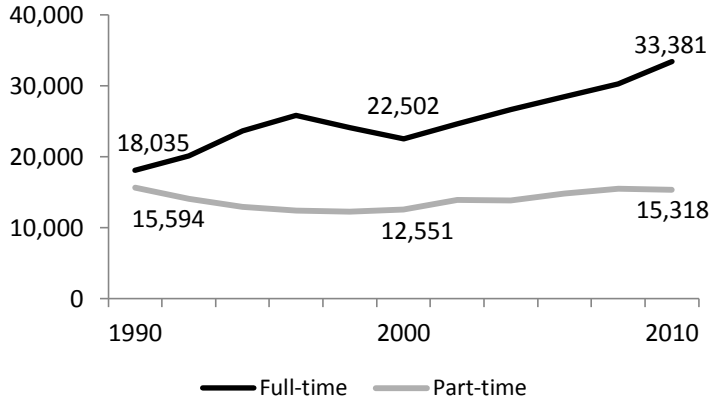
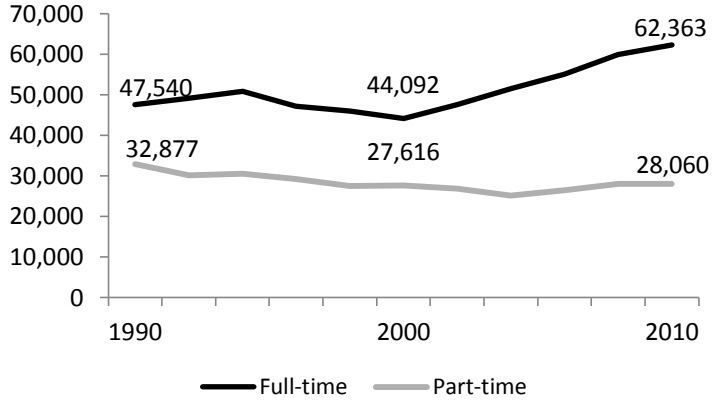


Figure 6.13. CUNY Undergraduate Enrollment, by Full-Time/Part-Time Status, Senior Colleges



Growth by multiple student characteristics. When we examine enrollment growth of student groups of particular gender, age, and race/ethnicity, interesting patterns emerge. Between 1990 and 2000, when enrollment at the university declined 2.7 percent, women fared better than men. Among older students, both men and women declined, with the decline steepest for older men. Among younger students, women grew more than men. There were large declines between 1990 and 2000 among older White men, older White women, older Black men, and younger White men.

Enrollment declines were steeper between 1990 and 2000 at the senior colleges, with every category of men declining at the senior colleges except older Hispanic men. White students declined at the senior colleges among both older and younger students, and among both men and women. During the first half of the study period Black students declined at the senior colleges with one exception – older Black women increased 5.6 percent at the senior colleges. Enrollment grew at the community colleges between 1990 and 2000 by 4.1 percent, but we saw declines in the community colleges among White students and among older women who were Black and Hispanic.

Between 2000 and 2010 we see different enrollment patterns. University-wide, enrollment expanded 35.2 percent, but among older Black women there was a decline of 11.8 percent across the university and a decline of 26.9 percent at the senior colleges. In fact, older Black women declined at all types of CUNY institutions between 2000 and 2010. Older Black men declined 2.3 percent across the University between 2000 and 2010, but declined 23.0 percent at the senior colleges. See Table 6.2.

Table 6.2. % Change in CUNY Undergraduate Enrollment, by Multiple Student Characteristics, 1990 – 2010

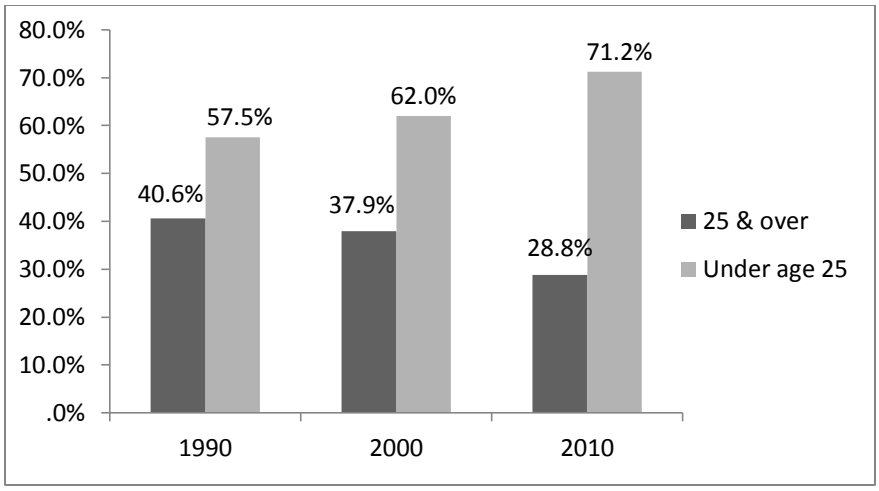
	% Change,Total University			% Change, Senior Colleges			% Change, Comprehensive Colleges			% Change, Community Colleges		
	1990 - 2000	2000 - 2010	1990 - 2010	1990 - 2000	2000 - 2010	1990 - 2010	1990 - 2000	2000 - 2010	1990 - 2010	1990 - 2000	2000 - 2010	1990 - 2010
All	-2.7%	35.2%	31.5%	-10.9%	26.0%	12.4%	4.2%	38.9%	44.8%	4.1%	43.5%	49.4%
25 & Over, Men	-13.7%	11.5%	-3.8%	-14.1%	0.9%	-13.3%	-21.1%	8.4%	-14.5%	-7.4%	28.3%	18.8%
Asian	7.7%	38.4%	49.0%	-1.6%	30.6%	28.6%	1.4%	45.7%	47.7%	27.9%	47.1%	88.1%
Black	-12.6%	-2.5%	-14.7%	-13.6%	-23.0%	-33.4%	-21.5%	2.3%	-19.7%	-2.1%	20.2%	17.7%
Hispanic	3.7%	19.0%	23.4%	4.1%	8.1%	12.5%	9.2%	5.6%	15.3%	1.0%	36.2%	37.5%
White	-29.3%	9.9%	-22.4%	-25.7%	5.3%	-21.8%	-35.3%	9.1%	-29.5%	-30.6%	19.6%	-17.0%
25 & Over, Women	-6.9%	-1.8%	-8.6%	-3.3%	-9.0%	-12.0%	1.0%	-3.0%	-2.0%	-14.3%	7.3%	-8.0%
Asian	40.3%	39.9%	96.3%	35.7%	29.3%	75.5%	31.3%	41.9%	86.3%	49.1%	52.6%	127.5%
Black	0.4%	-11.8%	-11.4%	5.6%	-26.9%	-22.7%	9.9%	-3.6%	5.9%	-10.9%	-0.4%	-11.2%
Hispanic	2.2%	6.8%	9.1%	16.9%	4.5%	22.2%	30.6%	8.1%	41.2%	-11.9%	8.4%	-4.5%
White	-27.3%	-6.7%	-32.2%	-25.7%	-8.5%	-32.0%	-22.6%	-13.6%	-33.1%	-32.4%	0.6%	-32.0%
Under 25, Men	0.5%	66.2%	67.0%	-14.2%	60.2%	37.4%	4.1%	67.9%	74.8%	17.7%	71.1%	101.3%
Asian	27.7%	88.4%	140.7%	-3.8%	103.2%	95.4%	49.1%	103.7%	203.6%	91.4%	64.9%	215.5%
Black	-5.7%	49.1%	40.6%	-20.4%	24.3%	-1.0%	-7.4%	54.2%	42.9%	9.5%	63.4%	78.8%
Hispanic	14.1%	94.9%	122.4%	-10.2%	72.6%	54.9%	31.9%	76.9%	133.2%	27.9%	118.1%	178.9%
White	-13.9%	43.3%	23.3%	-18.1%	45.7%	19.3%	-11.0%	58.4%	41.1%	-9.4%	28.0%	15.9%
Under 25, Women	8.0%	48.1%	60.0%	-3.3%	39.2%	34.6%	20.9%	59.2%	92.6%	16.9%	52.3%	78.1%
Asian	40.7%	89.5%	166.6%	18.3%	93.7%	129.1%	79.5%	122.8%	300.0%	81.5%	72.6%	213.3%
Black	-3.2%	31.0%	26.7%	-12.3%	11.0%	-2.7%	9.9%	47.7%	62.4%	-0.7%	39.3%	38.3%
Hispanic	27.5%	64.5%	109.6%	4.9%	45.3%	52.4%	63.7%	68.5%	175.8%	38.6%	77.7%	146.3%
White	-5.8%	28.1%	20.7%	-10.0%	26.9%	14.3%	0.6%	47.0%	47.9%	-2.4%	17.4%	14.6%

SOURCE: CUNY Institutional Research Database

Student Distribution Changes

Changing age profile. Over time the CUNY undergraduate student body has shifted to consist of more students of traditional college-going age and fewer older students. In 1990, 40.6 percent of the student body was age 25 or older, while just 28.8 percent of the student body was age 25 or older in 2010. See Figure 6.14.

Figure 6.14. CUNY Student Distribution, by Age 25 and Older, Total University



These changes have occurred at the community, comprehensive, and senior colleges. By 2010, 71.7 percent of all community college students, 72.5 percent of all comprehensive college students, and 70.1 percent of all senior college students were age 24 or younger. See Figures 6.15, 6.16, and 6.17.

Figure 6.15. CUNY Student Distribution, by Age 25 and Older, Community Colleges

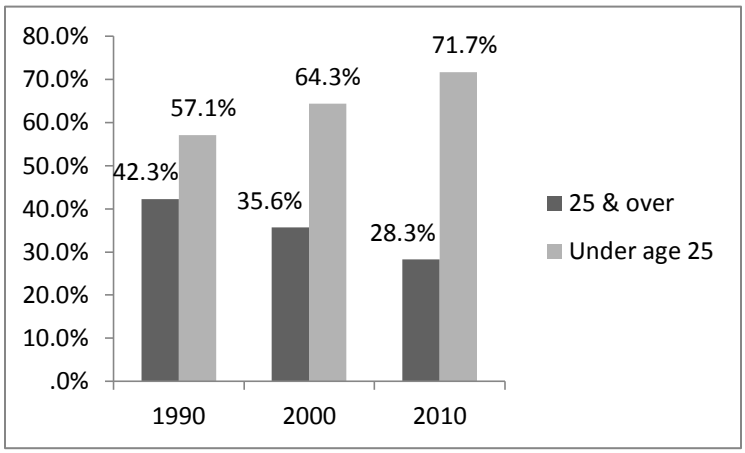


Figure 6.16. CUNY Student Distribution, by Age 25 and Older, Comprehensive Colleges

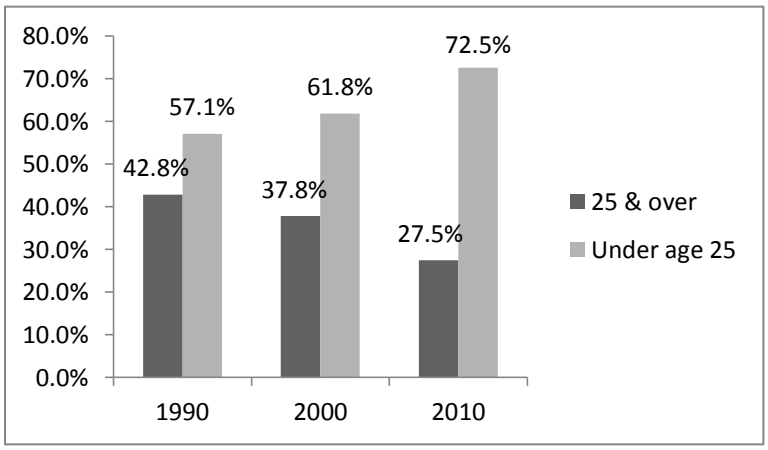
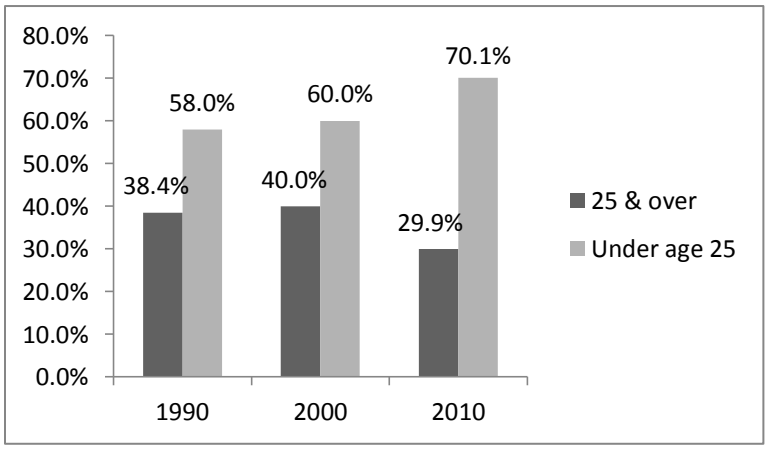
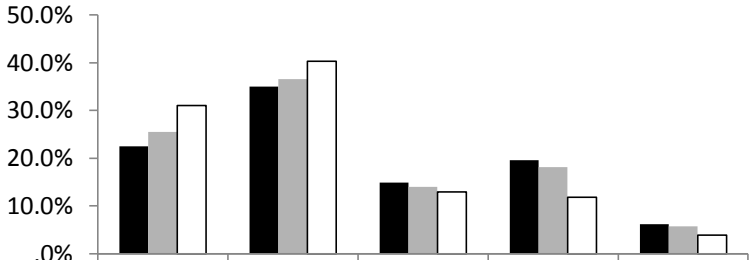


Figure 6.17. CUNY Student Distribution, by Age 25 and Older, Senior Colleges



Between 1990 and 2010 students age 30-44 saw the largest decline in their share of the overall student population, from 19.6 percent to 11.8 percent across the university. The proportion of students age 25 -29 and students age 45 and older also declined, while the proportion of younger students increased. Students age 19 and younger increased markedly, from 22.5 percent of the student population in 1990 to 31.0 percent in 2010. See Figure 6.18.

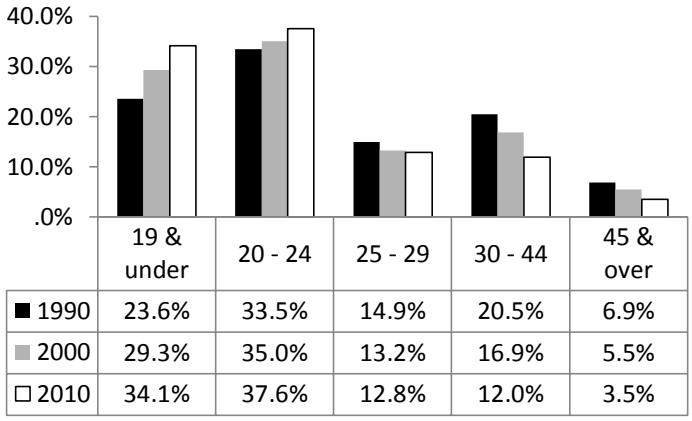
Figure 6.18. CUNY Student Distribution, by Age, Total University



	19 & under	20 - 24	25 - 29	30 - 44	45 & over
1990	22.5%	35.0%	14.8%	19.6%	6.2%
2000	25.5%	36.5%	14.0%	18.1%	5.8%
2010	31.0%	40.2%	13.0%	11.8%	3.9%

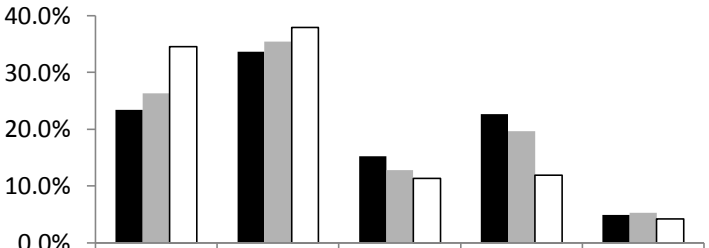
The shift toward a larger proportion of young students was especially pronounced at the community and comprehensive colleges, where students age 19 or younger increased 10.6 and 11.1 percentage points, respectively. At the senior colleges, where students might take longer to complete their degree and be enrolled for more years, the greatest shift was in the proportion of students age 20 – 24. Interestingly, while the community and comprehensive colleges had a larger proportion of students age 25 and older in 1990 (42 percent at both the community and comprehensive colleges versus 38 percent at the senior colleges), by 2000 the senior colleges had a slightly larger proportion of older students than the community and comprehensive colleges. See Figures 6.19, 6.20, and 6.21.

Figure 6.19. CUNY Student Distribution, by Age, Community Colleges



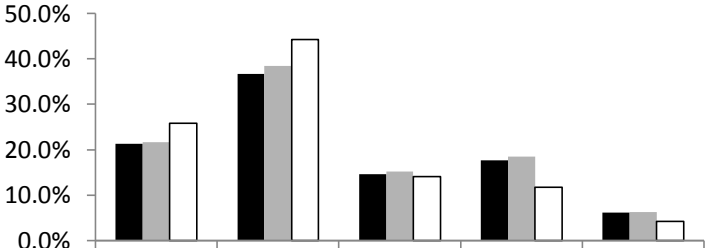
	19 & under	20 - 24	25 - 29	30 - 44	45 & over
1990	23.6%	33.5%	14.9%	20.5%	6.9%
2000	29.3%	35.0%	13.2%	16.9%	5.5%
2010	34.1%	37.6%	12.8%	12.0%	3.5%

Figure 6.20. CUNY Student Distribution, by Age, Comprehensive Colleges



	19 & under	20 - 24	25 - 29	30 - 44	45 & over
1990	23.4%	33.7%	15.2%	22.7%	4.9%
2000	26.4%	35.4%	12.8%	19.7%	5.3%
2010	34.6%	37.9%	11.3%	11.9%	4.2%

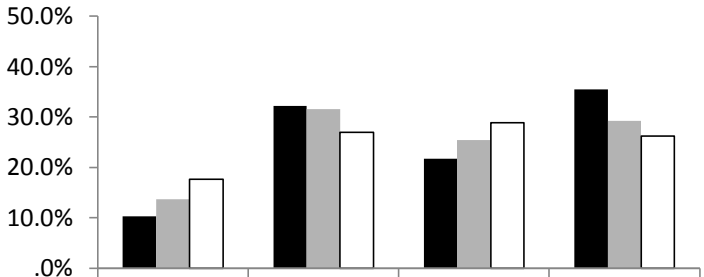
Figure 6.21. CUNY Student Distribution, by Age, Senior Colleges



	19 & under	20 - 24	25 - 29	30 - 44	45 & over
1990	21.3%	36.7%	14.6%	17.7%	6.1%
2000	21.6%	38.4%	15.2%	18.5%	6.2%
2010	25.9%	44.2%	14.0%	11.7%	4.2%

Changing race/ethnicity profile. Compared to earlier student populations, in 2010 a larger proportion of the undergraduate student population was Hispanic or Asian and a smaller proportion was Black or White. Approximately 32.2 percent of undergraduates were Black and 35.5 percent were White in 1990, while 27.0 percent were Black and 26.2 percent were White in 2010. In contrast, 10.3 percent of all undergraduates were Asian in 1990 while 17.7 percent were Asian in 2010. In 1990, 21.8 percent of undergraduates were Hispanic while 28.9 percent were Hispanic in 2010. See Figure 6.22.

Figure 6.22. CUNY Student Distribution, by Race/Ethnicity, Total University

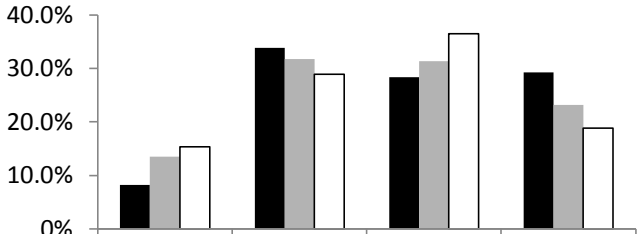


	Asian	Black	Hispanic	White
1990	10.3%	32.2%	21.8%	35.5%
2000	13.6%	31.6%	25.4%	29.2%
2010	17.7%	27.0%	28.9%	26.2%

The proportion of Black students declined most at the senior colleges. There was a 4.9 percentage point decline in the proportion of Black students at the community colleges, a 5.4 percentage point decline at the comprehensive colleges, and a 6.8 percentage point decline at the senior colleges. The decline in the proportion of White students was greatest at the community colleges. Hispanic students increased their share of enrolled undergraduates most at the community colleges – there was an 8.1 percentage point increase in the proportion of Hispanic students at the community colleges, 8.0 percentage point increase at the comprehensive colleges, and 4.5 percentage point increase at the senior colleges. Asian students increased their share

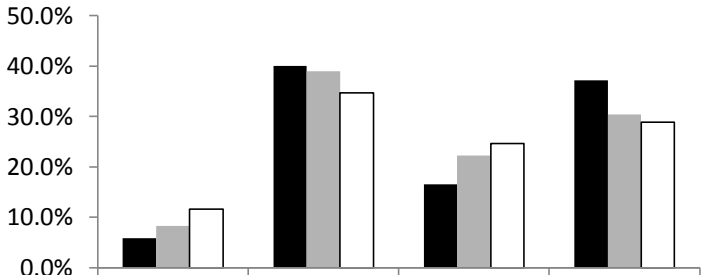
most at the senior colleges, from 13.7 percent in 1990 to 23.2 percent in 2010. See Figures 6.23, 6.24, and 6.25.

Figure 6.23. CUNY Student Distribution, by Race/Ethnicity, Community Colleges



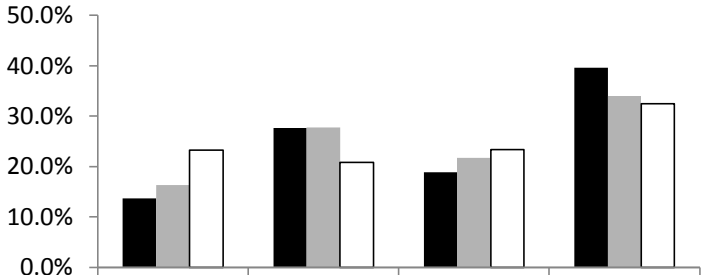
	Asian	Black	Hispanic	White
1990	8.3%	33.9%	28.4%	29.3%
2000	13.5%	31.8%	31.4%	23.2%
2010	15.4%	29.0%	36.5%	18.8%

Figure 6.24. CUNY Student Distribution, by Race/Ethnicity, Comprehensive Colleges



	Asian	Black	Hispanic	White
1990	5.9%	40.1%	16.6%	37.2%
2000	8.3%	39.0%	22.2%	30.4%
2010	11.7%	34.6%	24.6%	28.8%

Figure 6.25. CUNY Student Distribution, by Race/Ethnicity, Senior Colleges



	Asian	Black	Hispanic	White
1990	13.7%	27.6%	18.9%	39.6%
2000	16.4%	27.7%	21.7%	34.0%
2010	23.2%	20.8%	23.4%	32.4%

Changing full-time/part-time status profile. Between 1990 and 2010 the CUNY colleges became proportionally more full-time, with the change most striking at the comprehensive colleges. CUNY-wide there was a decrease in the proportion of part-time students by 9.0 percentage points. At the senior colleges, the proportion of part-time students decreased 9.8 percentage points while at the comprehensive colleges the proportion decreased 14.9 percentage points, and at the community colleges the proportion decreased 6.0 percentage points. There was a large decline in the proportion of part-time students enrolled in community colleges between 2008 and 2010. This recent trend at the community colleges was due to the fact that almost all enrollment growth between 2008 and 2010 was among full-time students. See Figures 6.26, 6.27, 6.28, and 6.29.

Figure 6.26. CUNY Student Distribution, by Full-Time/Part-Time Status, Total University

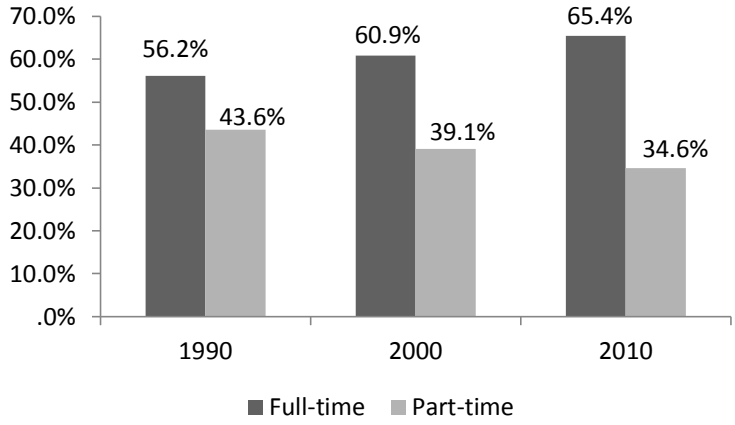


Figure 6.27. CUNY Student Distribution, by Full-Time/Part-Time Status, Community Colleges

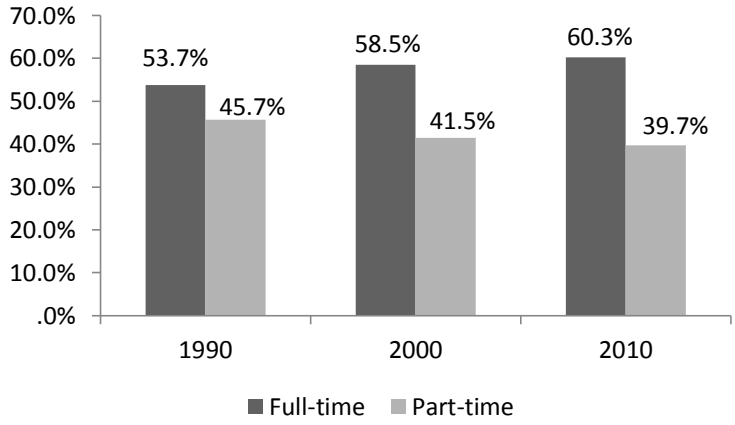


Figure 6.28. CUNY Student Distribution, by Full-Time/Part-Time Status, Comprehensive Colleges

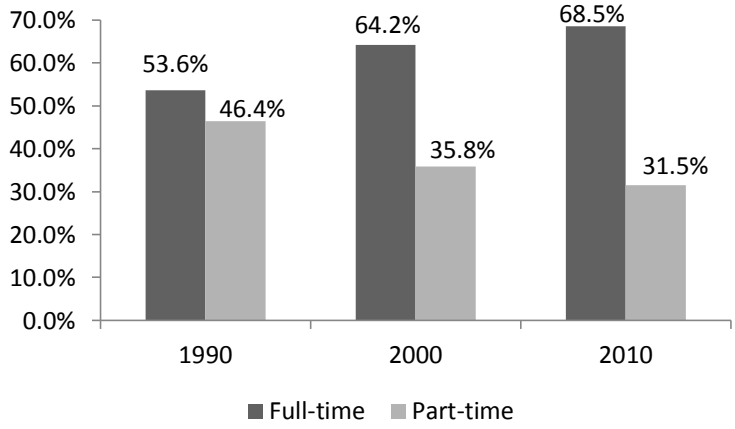
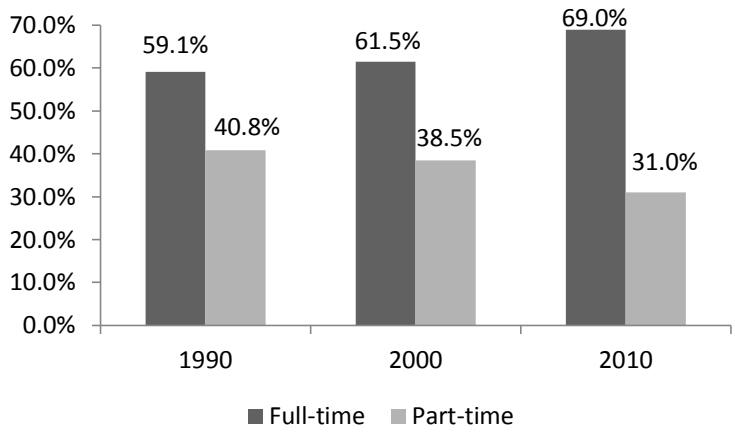


Figure 6.29. CUNY Student Distribution, by Full-Time/Part-Time Status, Senior Colleges



Student Enrollment Growth, by College

While it is useful to understand trends across the university and trends specific to the community, comprehensive, and senior colleges, it is also important to examine each individual college. The CUNY colleges attract distinct student groups based on their program offerings, entrance requirements, and geographic locations. Further, each college has its own practices, policies, and goals.

Growth by age, by college. Although the number of total undergraduates grew at every CUNY college over the 20-year period, the number of students age 25 and older declined at 10 colleges. Among senior colleges, City experienced the largest decline in the number of older students, from 4,563 in 1990 to 2,993 in 2010. Brooklyn was the only senior college to significantly increase the number of older students enrolled. In fact, while total enrollment increased by 6.8 percent at Brooklyn, enrollment of older students increased by 19.9 percent at the college. Among comprehensive colleges, the number of older students increased significantly at Medgar Evers, although growth among younger students outpaced growth among older

students at the college. Older students declined 36.6 percent at Staten Island although total undergraduate enrollment growth increased by 17.0 percent at the college. Three of the six community colleges experienced a decline in the number of older students. Queensborough and Kingsborough experienced more than a 20 percent decline in the number of older students, while older students increased 50.3 percent at LaGuardia. See Table 6.3.

Growth by part-time status, by college. The number of part-time students declined at almost all CUNY colleges between 1990 and 2000 – Medgar Evers, Kingsborough, and LaGuardia were exceptions. Over the 20-year period, at the senior colleges the number of part-time students decreased by 20 percent or more at Baruch, City, and Hunter, while Staten Island and Queensborough also experienced a large decline in the number of part-time students. Between 1990 and 2010 growth of part-time students at BMCC, Medgar Evers and NYCCT lagged behind total undergraduate enrollment growth, while growth of part-time students outpaced overall growth at Bronx, Hostos, and LaGuardia. See Table 6.3.

Table 6.3. % Change in CUNY Undergraduate Enrollment, by Age 25 and Older and Part-time Status, by College, 1990 – 2010

	% Change, Age 25 and Older			% Change, Part-time		
	1990 - 2000	2000 - 2010	1990 - 2010	1990 - 2000	2000 - 2010	1990 - 2010
Senior Colleges						
Baruch	11.1%	-26.4%	-18.2%	-2.1%	-30.3%	-31.8%
Brooklyn	4.5%	14.7%	19.9%	-15.6%	10.9%	-6.4%
City	-22.4%	-15.5%	-34.4%	-23.4%	1.2%	-22.5%
Hunter	-12.5%	-19.4%	-29.4%	-8.5%	-16.0%	-23.1%
Lehman	-15.5%	11.2%	-6.0%	-28.4%	30.2%	-6.8%
Queens	0.8%	0.4%	1.2%	-22.2%	3.1%	-19.7%
York	-11.1%	-21.8%	-30.5%	-15.7%	18.4%	-0.2%
Comprehensive Colleges						
John Jay	1.6%	-9.7%	-8.3%	-12.3%	11.6%	-2.2%
Medgar Evers	18.8%	8.6%	29.0%	19.4%	9.2%	30.4%
NYCCT	-12.0%	18.4%	4.1%	-21.4%	69.0%	32.9%
Staten Island	-24.6%	-15.9%	-36.6%	-35.5%	-7.7%	-40.5%
Community Colleges						
BMCC	-6.3%	12.1%	5.0%	-14.6%	26.9%	8.4%
Bronx	-2.5%	10.4%	7.6%	-3.3%	84.7%	78.5%
Hostos	-37.8%	42.8%	-11.2%	-10.8%	247.7%	210.0%
Kingsborough	-22.2%	2.7%	-20.2%	1.2%	0.3%	1.5%
LaGuardia	17.1%	28.3%	50.3%	111.5%	65.2%	249.3%
Queensborough	-25.4%	-0.8%	-26.0%	-36.0%	24.9%	-20.1%

SOURCE: CUNY Institutional Research Database

Growth by race/ethnicity, by college. Between 1990 and 2010 growth in enrollment of Asian students outpaced overall enrollment growth at every college except Bronx. The number of Asian students expanded by at least double at most colleges and by more than 425 percent at Hostos (from 56 to 295) and by more than 350 percent at John Jay (from 280 to 1,315).

In contrast to the large increases in the number of Asian students, six colleges had fewer Black students enrolled in 2010 compared to 1990, including: Baruch, BMCC, City, Hunter, NYCCT, and Queens. The number of Black students declined at Baruch by 59.5 percent, from 3,604 in 1990 to 1,459 in 2010. Black students declined at Hunter by 38.8 percent, at City by

36.5 percent, and at BMCC by 12.9 percent. Among the eleven colleges that experienced growth in the number of Black students, enrollment growth of Black students outpaced overall enrollment growth at five colleges: Brooklyn, Hostos, Kingsborough, Staten Island, and Queensborough.

The number of Hispanic undergraduates increased more rapidly compared to overall enrollment growth at all colleges except Baruch, Hunter, and Hostos. All community colleges (except Hostos), all comprehensive colleges, Queens, and York had more than an 80 percent increase in the number of Hispanic students between 1990 and 2010. Baruch was the only college to experience a decline in the number of Hispanic students – by 11.7 percent. Hostos was predominantly Hispanic in 1990 and diversified the student body over the 20-year period.

Growth of White undergraduates outpaced overall enrollment growth at Baruch, BMCC, City, Hostos, and Medgar Evers, while growth of such students was similar to overall enrollment growth at NYCCT and York. At the remaining 10 colleges, growth among other student groups outpaced growth of White students. See Table 6.4.

Table 6.4. % Change in CUNY Undergraduate Enrollment, by Race, by College, 1990 – 2010

	% Change, Asian Students			% Change, Black Students			% Change, Hispanic Students			% Change, White Students		
	1990 - 2000	2000 - 2010	1990 - 2010	1990 - 2000	2000 - 2010	1990 - 2010	1990 - 2000	2000 - 2010	1990 - 2010	1990 - 2000	2000 - 2010	1990 - 2010
Senior Colleges												
Baruch	13.3%	42.8%	61.7%	-17.5%	-50.9%	-59.5%	7.6%	-17.9%	-11.7%	1.8%	11.7%	13.7%
Brooklyn	-3.7%	114.6%	106.7%	6.4%	15.1%	22.5%	-4.1%	49.9%	43.8%	-28.1%	9.4%	-21.4%
City	-30.4%	113.0%	48.2%	-28.4%	-11.3%	-36.5%	-14.4%	62.5%	39.1%	-41.0%	135.3%	38.8%
Hunter	48.1%	59.5%	136.3%	-1.8%	-37.7%	-38.8%	18.1%	-11.9%	4.0%	-1.5%	4.7%	3.1%
Lehman	-21.0%	90.9%	50.7%	1.6%	13.2%	15.0%	0.5%	64.7%	65.5%	-63.7%	28.6%	-53.4%
Queens	9.1%	100.6%	118.9%	-16.7%	18.1%	-1.6%	4.8%	73.2%	81.5%	-33.2%	20.9%	-19.3%
York	-7.9%	140.8%	121.9%	-8.1%	17.1%	7.6%	6.6%	83.0%	95.1%	-13.1%	57.5%	36.9%
Comprehensive Colleges												
John Jay	85.7%	152.9%	369.6%	-2.9%	4.8%	1.8%	50.5%	51.7%	128.3%	6.6%	37.1%	46.2%
Medgar Evers	34.0%	125.4%	202.1%	28.2%	49.6%	91.8%	13.0%	74.4%	97.1%	80.0%	39.5%	151.1%
NYCCT	51.8%	99.6%	203.1%	-11.5%	12.4%	-0.5%	26.7%	44.3%	82.8%	-16.4%	74.5%	45.8%
Staten Island	26.7%	56.3%	98.0%	2.7%	25.9%	29.3%	53.5%	86.9%	187.0%	-21.1%	21.4%	-4.2%
Community Colleges												
BMCC	73.9%	48.3%	157.9%	-19.1%	7.6%	-12.9%	35.9%	70.4%	131.7%	38.0%	68.8%	133.0%
Bronx	-23.3%	89.7%	45.5%	-12.6%	30.4%	14.0%	33.2%	74.7%	132.7%	4.7%	11.7%	16.9%
Hostos	51.8%	247.1%	426.8%	40.0%	208.5%	331.8%	-37.1%	67.3%	5.3%	-23.3%	347.0%	243.0%
Kingsborough	109.9%	71.4%	259.8%	49.0%	37.3%	104.6%	20.0%	52.7%	83.1%	-18.3%	-0.5%	-18.7%
LaGuardia	71.3%	68.6%	188.9%	-5.6%	35.9%	28.2%	34.4%	57.0%	111.1%	37.3%	19.1%	63.5%
Queensborough	59.8%	58.7%	153.5%	-1.0%	33.1%	31.8%	13.0%	78.0%	101.1%	-46.4%	14.7%	-38.6%

SOURCE: CUNY Institutional Research Database

Student Distribution Changes, by College

Changing age profile, by college. At the senior colleges, the average age of enrolled undergraduates remained steady at 27.0 years between 1990 and 2000, and then declined to 24.9 years by 2010. Students at the comprehensive and community colleges declined in age over the 20-year period, from 26.8 to 24.4 at the comprehensive colleges, and from 27.4 to 24.2 at the community colleges. While community college students were, on average, older than students at the senior and comprehensive colleges in 1990, community colleges students were the youngest by 2010.

Every CUNY college experienced a decline in the average age of enrolled undergraduates. All senior colleges except Hunter experienced this decline after 2000. The average age at Hunter declined by 2.2 years between 1990 and 2000, and by an additional 1.2 years between 2000 and 2010. Comprehensive and community colleges declined in age between 1990 and 2000, and also between 2000 and 2010, with most decline occurring after 2000. Kingsborough is the one exception to this trend, where the average age of undergraduates declined most prior to 2000.

Colleges with a decline of 2.5 years or more in the average age of enrolled undergraduates between 1990 and 2010 include City, Hunter, Lehman, York, Medgar Evers, Staten Island, Bronx, Hostos, Kingsborough, and Queensborough. Particularly striking declines occurred at select colleges, including declines of 5.0 years at York (from 29.6 to 24.6 years), 5.0 years at Kingsborough (from 28.6 to 23.6), 4.8 years at Hostos (from 30.6 to 25.7), and 4.4 years at Medgar Evers (from 32.0 to 27.5 years). See Table 6.5.

Changing part-time status profile, by college. Between 1990 and 2010 all three types of CUNY colleges declined in terms of the percentage of students enrolled part-time. The decline was largest at the comprehensive colleges (from 46.4 percent to 31.5 percent) followed by the senior colleges (from 40.8 percent to 31.0 percent). Most decline at the senior colleges occurred after 2000. All senior colleges except Brooklyn experienced a decline of approximately 10 percentage points or greater. In 2010, the percentage of part-time students enrolled in CUNY senior colleges varied from 24.0 percent at Baruch to 41.6 percent at Lehman.

The percentage of part-time students declined greatly at each comprehensive college, except NYCCT where the percentage of part-time students declined by just 2.5 percent over the 20-year period. The percentage of part-time students declined 25.4 percent at Staten Island, from 51.6 percent in 1990 to 26.2 percent in 2010. The greatest decline occurred prior to 2000 at each comprehensive college, except Medgar Evers where the largest decline in the percentage of part-time students occurred after 2000.

Trends at the community colleges varied widely. Hostos and LaGuardia had very small proportions of the student body enrolled part-time in 1990 and increased the percentage of part-time students over the 20-year period. In contrast, Kingsborough and Queensborough had very large proportions of the student body enrolled part-time in 1990 and had large decreases in the percentage of part-time students. By 2010, the percentage of part-time students at the community colleges was fairly consistent, ranging from 35.1 percent at BMCC to 42.5 percent at Bronx. See Table 6.5.

Table 6.5. CUNY Student Distribution, by Average Age, Part-time Status, and College, 1990 – 2010

	Avg Age			% Part-time		
	1990	2000	2010	1990	2000	2010
Senior Colleges	27.0	27.0	24.9	40.8%	38.5%	31.0%
Baruch	24.6	25.0	23.7	35.5%	34.6%	24.0%
Brooklyn	25.0	25.6	24.5	34.2%	34.1%	30.0%
City	26.5	26.9	23.6	35.1%	36.8%	24.8%
Hunter	29.0	26.7	25.6	46.3%	39.3%	32.6%
Lehman	29.7	29.8	27.2	51.5%	45.3%	41.6%
Queens	26.4	27.8	24.5	39.2%	38.9%	27.8%
SPS	--	--	36.7	--	--	75.2%
York	29.6	29.6	24.6	51.9%	46.6%	37.9%
Comprehensive Colleges	26.8	26.3	24.4	46.4%	35.8%	31.5%
John Jay	25.1	24.6	22.9	42.1%	31.0%	24.9%
Medgar Evers	32.0	31.6	27.5	52.9%	49.3%	35.5%
NYCCT	26.0	25.6	24.6	42.1%	32.7%	39.6%
Staten Island	27.0	26.1	23.8	51.6%	37.5%	26.2%
Community Colleges	27.4	25.9	24.2	45.7%	41.5%	39.7%
BMCC	26.4	25.6	24.4	49.0%	38.8%	35.1%
Bronx	28.0	27.3	25.1	39.8%	35.7%	42.5%
Hostos	30.6	29.0	25.7	20.4%	25.2%	42.4%
Kingsborough	28.6	25.5	23.6	53.5%	50.3%	40.2%
LaGuardia	26.5	25.7	24.5	23.1%	37.8%	42.4%
Queensborough	26.3	25.3	23.2	61.6%	45.8%	39.9%

SOURCE: CUNY Institutional Research Database

Changing race/ethnicity profile, by college. By 2010, a greater proportion of the undergraduate student body was Asian and Hispanic and a smaller proportion was Black or White. This trend was consistent for the senior, comprehensive, and community colleges. The senior colleges experienced the greatest decline in the percentage of Black students and greatest increase in the percentage of Asian students, while the community colleges experienced the greatest decline in the percentage of White students and greatest increase in the percentage of Hispanic students.

Each college exhibited a unique scenario. For example, Baruch had a large decline in the proportion of Black students and also declined in the proportion of Hispanic students. Baruch made up for those declines with a significant increase in the proportion of Asian students. Hunter had a large decline in the proportion of Black students, moderate declines in the proportion of Hispanic and White students, and a large increase in the proportion of Asian students. City and York also had large declines in the proportion of Black students, but all other groups increased their representation. Brooklyn, Lehman and Queens had large decreases in the proportion of White students – Brooklyn and Queens became increasingly Asian, while Lehman became increasingly Hispanic.

Among the comprehensive colleges, there were large declines in the proportion of Black students at John Jay and NYCCT – each experiencing growth among Asian and Hispanic students. Staten Island experienced a large decline in the proportion of White students, while Asian and Hispanic students grew and Black students remained about 10 percent of the undergraduate student body. Medgar Evers was the only college to maintain a similar racial mix of students over the 20-year period, consistently enrolling more than 90 percent Black students.

BMCC had more than a 24 percentage point decline in the proportion of Black students, from 57.1 percent Black in 1990 to 32.9 percent Black in 2010. The proportion of Black students also declined at Bronx and LaGuardia. At Hostos the proportion of Black students increased while there was a large decline in the proportion of Hispanic students, from 86.4 percent Hispanic in 1990 to 60.8 percent Hispanic in 2010. The proportion of White students declined greatly at Kingsborough where the student body became increasingly Black and Asian, and at Queensborough where the student body became increasingly Asian and Hispanic. See Table 6.6.

Table 6.6. CUNY Student Distribution, by Race/Ethnicity, by College, 1990 – 2010

	% Asian			% Black			% Hispanic			% White		
	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010
Senior Colleges	13.7%	16.4%	23.2%	27.6%	27.7%	20.8%	18.9%	21.7%	23.4%	39.6%	34.0%	32.4%
Baruch	24.6%	27.8%	39.5%	27.5%	22.6%	11.0%	18.4%	19.7%	16.1%	29.4%	29.8%	33.2%
Brooklyn	8.9%	10.1%	17.2%	24.3%	30.5%	27.9%	9.3%	10.5%	12.5%	57.4%	48.8%	42.3%
City	16.8%	16.0%	22.7%	40.2%	39.4%	23.2%	27.2%	31.9%	34.5%	15.4%	12.4%	19.4%
Hunter	11.4%	15.7%	24.7%	21.8%	19.9%	12.2%	20.0%	21.9%	19.0%	46.4%	42.3%	43.7%
Lehman	4.7%	4.5%	6.1%	30.7%	38.2%	30.5%	36.3%	44.8%	52.1%	27.8%	12.4%	11.2%
SPS	--	--	7.4%	--	--	31.6%	--	--	21.6%	--	--	39.3%
Queens	14.0%	19.4%	27.1%	9.9%	10.5%	8.6%	11.2%	14.9%	17.9%	64.9%	55.1%	46.2%
York	11.9%	11.7%	19.4%	65.3%	64.0%	51.4%	14.2%	16.1%	20.2%	8.5%	7.9%	8.5%
Comprehensive Colleges	5.9%	8.3%	11.7%	40.1%	39.0%	34.6%	16.6%	22.2%	24.6%	37.2%	30.4%	28.8%
John Jay	3.5%	5.4%	9.8%	37.2%	30.4%	22.9%	29.8%	37.7%	41.1%	29.2%	26.2%	25.9%
Medgar Evers	1.3%	1.4%	2.0%	91.6%	91.7%	90.4%	5.7%	5.0%	5.8%	1.2%	1.7%	1.6%
NYCCT	8.3%	12.4%	17.7%	55.6%	48.6%	39.1%	21.2%	26.6%	27.5%	14.9%	12.3%	15.3%
Staten Island	6.8%	9.8%	11.6%	9.8%	11.4%	10.9%	5.9%	10.2%	14.4%	76.9%	68.4%	63.0%
Community Colleges	8.3%	13.5%	15.4%	33.9%	31.8%	29.0%	28.4%	31.4%	36.5%	29.3%	23.2%	18.8%
BMCC	8.5%	13.6%	14.4%	57.1%	42.8%	32.9%	25.0%	31.6%	38.3%	9.2%	11.8%	14.1%
Bronx	3.1%	2.2%	2.7%	48.7%	39.6%	33.3%	43.6%	53.8%	60.7%	4.3%	4.2%	3.0%
Hostos	1.3%	2.7%	4.5%	10.3%	20.0%	29.8%	86.4%	75.1%	60.8%	2.0%	2.1%	4.5%
Kingsborough	5.1%	9.9%	13.5%	22.3%	30.8%	33.7%	11.8%	13.1%	16.0%	60.7%	46.1%	36.6%
LaGuardia	15.3%	20.2%	23.1%	28.4%	20.7%	19.1%	37.1%	38.6%	41.1%	19.0%	20.2%	16.3%
Queensborough	11.6%	21.4%	23.7%	23.7%	27.2%	25.3%	16.2%	21.2%	26.4%	48.3%	30.0%	24.0%

SOURCE: CUNY Institutional Research Database

Chapter 7. External Factors and Demographic Change at CUNY

We know that during the past two decades students who were younger, Asian, or Hispanic increased substantially at CUNY, while other student groups increased modestly or declined. The following chapter will explore possible reasons for demographic shifts at CUNY. In particular, factors that might be conceived as "external to CUNY" will be examined, including changes in the demographics of New York City; changing trends among NYC high school graduates; and the changing landscape of higher education, particularly the rise of the for-profit sector. The following research questions will be explored:

1. How does demographic change at CUNY relate to demographic change among residents of New York City?
2. How does demographic change at CUNY relate to demographic change among New York City high school graduates?
3. How do undergraduate enrollment patterns at CUNY resemble those within New York State and nationally? How do undergraduate enrollment patterns at CUNY resemble those at other public, private (not for-profit), and for-profit institutions, and other 4-year and 2-year institutions?
4. Is demographic change at CUNY related to the growing for-profit sector?

As a starting point for these data explorations, Table 7.1 presents shifting demographics among first-time freshmen[8] entering CUNY between 2000 and 2010.

[8] "First-time freshmen" include those who had never before enrolled in higher education, and do not include pre-college, transfer, readmitted, or continuing students.

Table 7.1. CUNY First-time Freshmen, by Age and Race/Ethnicity, 2000 – 2010

	2000	2002	2004	2006	2008	2010	% Change 2000 to 2010	% Change 2004 to 2010
All	29,236	3,346	33,228	35,498	38,681	37,597	28.6%	13.1%
Age								
UNDER 19	14,831	16,509	19,104	21,578	24,138	24,111	62.6%	26.2%
19	3,786	3,779	4,215	4,346	4,940	4,785	26.4%	13.5%
20 - 22	4,081	4,325	3,959	4,077	4,460	4,176	2.3%	5.5%
23 - 24	1,285	1,358	1,286	1,218	1,272	1,107	-13.9%	-13.9%
25 - 29	1,815	1,988	1,704	1,562	1,593	1,392	-23.3%	-18.3%
30 - 44	2,368	2,568	2,055	1,831	1,486	1,395	-41.1%	-32.1%
45 & OVER	1,021	1,012	897	880	788	629	-38.4%	-29.9%
Race/Ethnicity								
Asian	4,080	4,407	4,805	5,605	6,444	6,823	67.2%	42.0%
Black	8,577	9,240	9,492	9,925	10,438	9,631	12.3%	1.5%
Hispanic	7,884	8,279	9,293	10,433	12,309	12,260	55.5%	31.9%
White	8,651	9,579	9,582	9,475	9,378	8,746	1.1%	-8.7%
Native American	44	43	56	60	112	137	211.4%	144.6%

SOURCE: CUNY Institutional Research Database

Key Findings – Changing NYC Demographics

- New York City did not experience an influx of students of traditional college-going age, suggesting that there was little relationship between changes in the city's age distribution and changes at CUNY.
- Census data on the race/ethnicity distribution of New York City suggest that changes at CUNY generally follow city-wide patterns. However, percentage increases at CUNY among Asian and Hispanic first-time freshmen were more significant than city-wide, and the number of Black first-time freshmen at CUNY increased modestly while the number of Black people in New York City declined.

Key Findings – Changes among NYC High School Graduates

- Among first-time freshmen under age 19, growth at CUNY was more rapid than would be expected based solely on rising NYC high school graduation rates. The number of Asian high school graduates increased 22.3 percent, while the number of Asian first-time freshmen under age 19 at CUNY increased 49.1 percent. Blacks and Hispanics also increased their representation at CUNY more rapidly than would be expected based on high school graduation patterns.
- The proportion of students who enroll in CUNY immediately following high school graduation may be increasing. In 2004 first-time freshmen under age 19 were equivalent to 34.7 percent of the total population of NYC high school graduates, while the figure had increased to 38.6 percent in 2010.

Key Findings- Changing Landscape of Higher Education

- While the for-profit sector is still a relatively small component of the higher education system, the sector has shown rapid growth. In 1991 approximately 1.3 percent of all higher education enrollments were in the for-profit sector compared to 9 percent in 2009. In New York, the for-profit sector encompassed approximately 5 percent of all higher education enrollments in 2009.
- Among public institutions growth was greatest in the 2-year sector, while among for-profit institutions growth was greatest in the 4-year sector. Compared to national trends, there was less growth in higher education in New York State.
- In New York State, enrollment growth was greatest among students age 19 and under in the public, private, and for-profit sectors. Nationally, enrollment growth in private and

public institutions was greatest among students age 19 and under. In contrast, enrollment among older students increased rapidly in the for-profit sector nationally. For example, the number of students age 30 to 39 enrolled in public 4-year institutions declined 19.1 percent between 1993 and 2009 (from 518,475 to 419,579), while the number of such students increased 1,437.3 percent in for-profit 4-year institutions (from 22,023 to 338,568).

- Between 1991 and 2009 undergraduates attending full-time grew more rapidly compared to part-time students in the public and private sectors, while part-time students grew more rapidly in the for-profit sector. In New York full-time students grew more rapidly than part-time students in all sectors of higher education. The number of part-time students expanded just 2.5 percent in the 4-year for-profit sector in New York.
- Nationally and in New York the proportion of enrolled undergraduates who were age 25 and older declined between 1993 and 2009. This decline was more pronounced in New York – there was a 6.9 percentage point decline among students age 25 and older in New York compared to a 3.0 percentage point decline nationally.
- While nationally there was a slight increase in the proportion of Black students, in New York the proportion of Black students remained unchanged between 1995 and 2009. While there was a slight increase in the proportion of Black students at the State University of New York (SUNY), there was a 4.8 percentage point decline in the proportion of Black students at CUNY and a 6.2 percentage point decline at the CUNY senior colleges particularly.
- Nationally and in New York the proportion of part-time students declined between 1991 and 2009. There was a significant decline in the proportion of part-time students in public

institutions in New York (a sharper decline than in public institutions nationally).

Key Findings - Public and For-Profit Sectors, a Closer Analysis

- Many of the demographic shifts at CUNY are contrary to shifts in the for-profit sector in New York City. For example, while students age 25 and older declined at CUNY between 1995 and 2009, enrollment of such students increased in NYC's for-profit sector. The number of Black students declined 25.4 percent at CUNY senior colleges, while Black students increased 125.7 percent at NYC 4-year for-profit institutions.
- The expanding for-profit sector in New York City does not account entirely for the demographic shifts at CUNY. For example, between 1995 and 2009 there was a 19.8 percent decrease in the number of students age 25 and older attending CUNY. Even if all students age 25 and older enrolled in for-profit institutions in New York City had instead attended a CUNY college, there still would have been a 10.3 percent decrease.
- Nationally, if the increase in enrollment in the for-profit sector had instead been concentrated in public institutions, between 1995 and 2009 enrollment of students age 25 and older would have increased 38.1 percent rather than 12. 8 percent, enrollment of Black students would have increased 89.7 percent rather than 64.3 percent, and enrollment of Hispanic students would have increased 120.1 percent rather than 106.6 percent.

Changing NYC Demographics

Data from the 2000 and 2010 U.S. Census suggest there was little relationship between changes in the city's age distribution and changes at CUNY. New York City did not experience

an influx of students of traditional college-going age. Residents of New York City between the ages of 15 and 19 increased 2.9 percent between 2000 and 2010. In contrast, first-time freshmen age 19 and younger increased 55.2 percent at CUNY. While New York City experienced a slight decline in the number of residents age 25 to 44, CUNY experienced a much sharper decline. Among residents age 45 and older there was a 13.5 percent increase in New York City, while there was almost a 40 percent decline at CUNY. See Figure 7.1.

Census data on the race/ethnicity distribution of New York City suggests that changes at CUNY generally follow city-wide patterns, although increases in the percentage of Asian and Hispanic students were more significant at CUNY than city-wide. The number of Black people in New York City declined 1.5 percent over the decade, while the number of Black first-time freshmen increased at CUNY by 8.9 percent. See Figure 7.2.

A limitation of the analysis is that race/ethnicity data from the U.S. Census are not disaggregated by age or by educational attainment. It is possible that much of the change in the race/ethnicity composition of New York City was concentrated among particular age groups or levels of educational attainment. Another limitation of the analysis is that the U.S. Census Bureau reports Hispanic or Latino status separately from race, while CUNY reports combined race/ethnicity categories. For example, CUNY reports data for Black, non-Hispanic, while the Census reports data for all Black individuals (regardless of whether they were Hispanic or Latino). The Census also reports "other" and "two or more races" categories while CUNY does not. As a result the comparison presented here only provides a rough approximation.

Table 7.2. Demographic Change in New York City, 2000 – 2010

	2000		2010		% Change
	#	%	#	%	2000 to 2010
Total population	8,008,278	100.0	8,175,133	100.0	2.1
Age					
Under 5 years	540,878	6.8	517,724	6.3	-4.3
5 to 9 years	561,115	7.0	473,159	5.8	-15.7
10 to 14 years	530,816	6.6	468,154	5.7	-11.8
15 to 19 years	520,641	6.5	535,833	6.6	2.9
20 to 24 years	589,831	7.4	642,585	7.9	8.9
25 to 34 years	1,368,021	17.1	1,392,445	17.0	1.8
35 to 44 years	1,263,280	15.8	1,154,687	14.1	-8.6
45 and Over	2,633,696	32.9	2,990,546	36.6	13.5
Race					
Asian or Pacific Islander	792,477	9.9	1,043,535	12.8	31.7
Black or African American	2,129,762	26.6	2,088,510	25.5	-1.9
White	3,576,385	44.7	3,597,341	44.0	0.6
American Indian and Alaska Native	41,289	0.5	57,512	0.7	39.3
Some Other Race	1,074,406	13.4	1,062,334	13.0	-1.1
Two or More Races	393,959	4.9	325,901	4.0	-17.3
Hispanic or Latino					
Hispanic or Latino (of any race)	2,160,554	27.0	2,336,076	28.6	8.1

SOURCE: U.S. Census Bureau, American FactFinder, Summary File 1

Figure 7.1. % Change by Age, New York City Residents and CUNY First-time Freshmen, 2000 – 2010

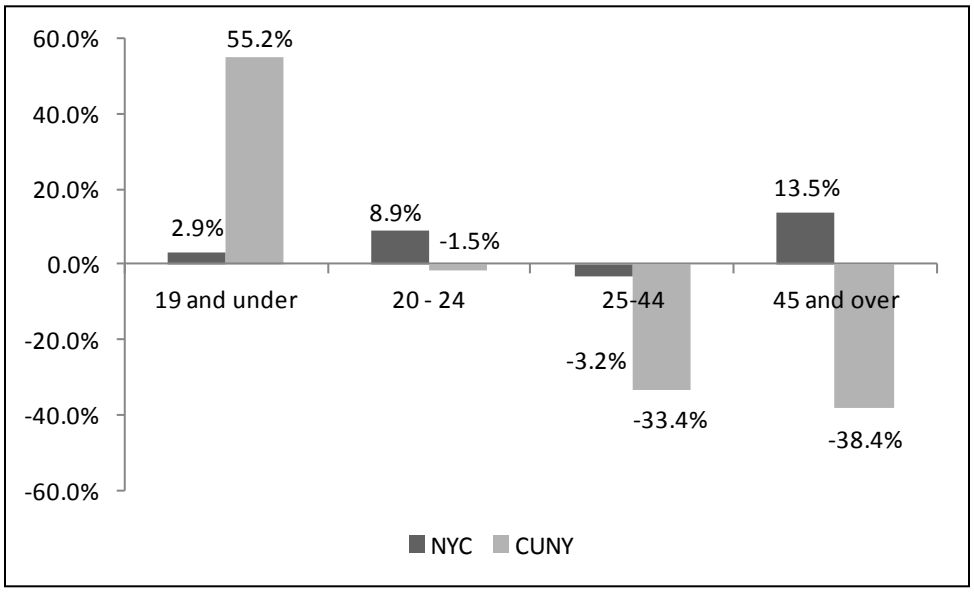
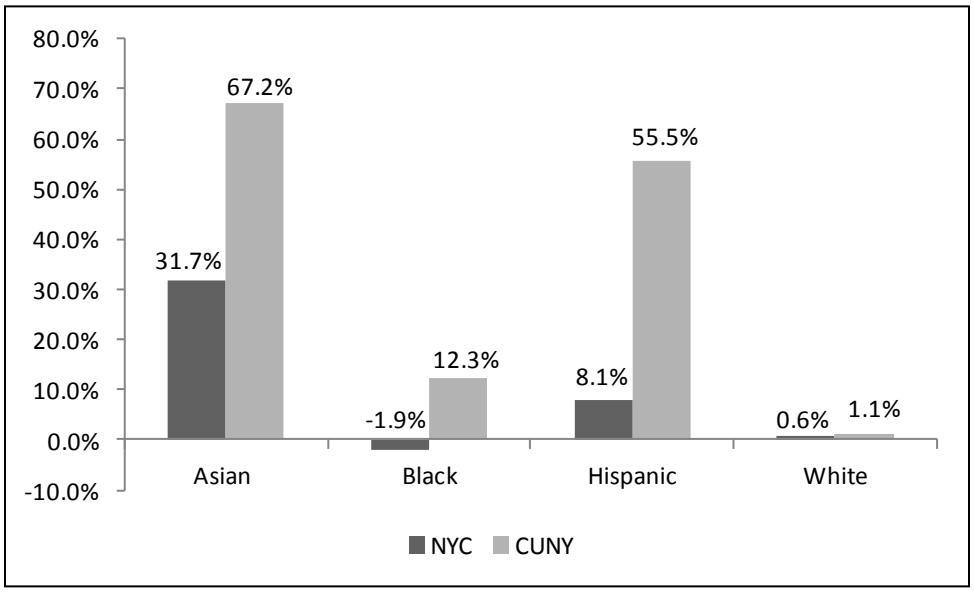


Figure 7.2. % Change by Race/Ethnicity, New York City Residents and CUNY First-time Freshmen, 2000 – 2010



Changes among NYC High School Graduates

Approximately 8 out of 10 entering CUNY freshmen come from New York City public or private high schools (The City University of New York, Office of Institutional Research and Assessment, 2012c). High school graduation rates have increased nationally and in New York City, providing an increased number of eligible students who may enroll in college. According to the Editorial Projects in Education Research Center (2012), the national graduation rate increased from 66.0 percent to 73.4 percent between 1999 and 2009. In New York City, there has been a large increase in the percent of students graduating from high school – from 33.6 percent in 1999 to 72.2 percent in 2009. In fact, between 2008 and 2009 there was an increase of almost 15 percentage points in graduation rates in New York City. The Editorial Projects in Education Research Center uses the Cumulative Promotion Index to calculate the percent of public school students who begin 9th grade and graduate on time with a regular diploma. See Table 7.3.

Table 7.3. High School Graduation Rates, 1999 – 2009

	New York City Public Schools	National Average
2009	72.2%	73.4%
2008	57.3%	71.7%
2007	54.8%	68.8%
2006	49.9%	69.2%
2005	50.5%	70.6%
2004	45.2%	70.0%
2003	38.9%	69.7%
2002	36.8%	69.3%
2001	38.2%	68.0%
2000	36.7%	66.8%
1999	33.6%	66.0%

SOURCE: Editorial Projects in Education Research Center, 2012

In terms of the number of students in New York City receiving high school diplomas, actual and projected data from the New York State Education Department (2008) suggests a 13.5 percent increase in the number of high school graduates between 2004 and 2010. Increases were pronounced among Hispanic and Asian high school graduates, while the number of White high school graduates declined 8.3 percent. See Table 7.4.

Table 7.4. New York City High School Graduates, by Race/Ethnicity, 2004 – 2010

	2004 (Actual)	2005 (Actual)	2006 (Actual)	2007 (Actual)	2008 (Estimated)	2009 (Projected)	2010 (Projected)	% Change 2004 to 2010	# Change 2004 to 2010
All	55,055	53,879	58,676	61,593	63,465	64,848	62,473	13.5%	7,418
Race/Ethnicity									
Asian	7,922	7,948	8,952	9,497	9,825	9,826	9,692	22.3%	1,770
Black	15,873	15,359	16,825	18,346	19,015	19,328	17,966	13.2%	2,093
Hispanic	15,095	14,789	17,045	18,280	19,394	20,573	19,943	32.1%	4,848
White	16,031	15,646	15,721	15,360	15,082	14,956	14,693	-8.3%	-1,338
Native American	134	137	133	110	149	165	179	33.6%	45

SOURCE: New York State Education Department, Office of Research and Information Services, December 2008

Comparing the percentage increase of the number of high school graduates with the percentage increase of first-time freshmen under age 19 allows us to better understand the relationship between rising high school graduation rates and enrollment at CUNY. Among first-time freshmen under age 19, growth at CUNY was more rapid than would be expected based solely on NYC high school graduation trends. Between 2004 and 2010 high school graduates increased 13.5 percent, while the number of CUNY first-time freshmen under age 19 increased 26.2 percent. While the number of Asian high school graduates increased 22.3 percent, the number of Asian first-time freshmen under age 19 at CUNY increased 49.1 percent. Blacks and Hispanics also increased their representation at CUNY more rapidly than would be expected based on high school graduation patterns. The enrollment of White first-time freshmen under age 19 remained steady between 2004 and 2010, while the number of White high school graduates declined over the time period. See Figure 7.3.

One possibility is that CUNY is drawing increasing numbers of students from private high schools or high schools outside New York City. Another possibility is that the proportion of students who enroll in CUNY immediately following high school graduation has increased. In 2004, first-time freshmen under age 19 were 34.7 percent of the total population of NYC high school graduates, while the figure had increased to 38.6 percent in 2010. See Table 7.5.

Figure 7.3. % Change CUNY First-time Freshmen under Age 19 and NYC HS Graduates, 2004 – 2010

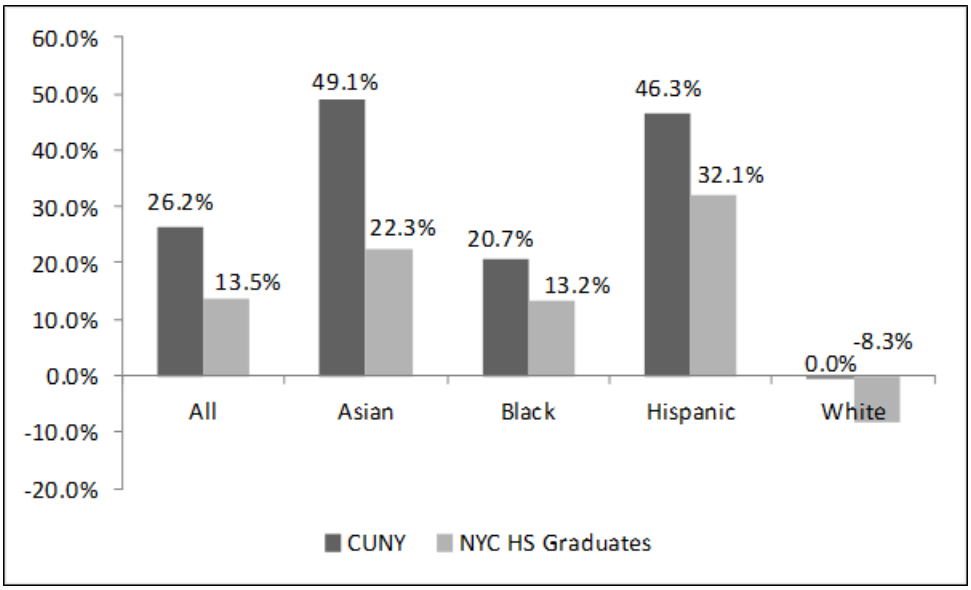


Table 7.5. CUNY First-time Freshmen under Age 19 as Percent of NYC HS Graduates, 2004 – 2010

2004	2005	2006	2007	2008	2009	2010
34.7%	36.9%	36.8%	38.0%	38.0%	39.3%	38.6%

SOURCE: New York State Education Department, Office of Research and Information Services, December 2008 and CUNY Institutional Research Database

Consistent with New York City data displayed above, data from the National Center for Education Statistics shows that the number of high school graduates is increasing and the proportion of high school graduates enrolling in college is also increasing. Between 1990 and 2009 the number of high school completers increased approximately 24 percent (Snyder & Dillow, 2011). Sixty percent of high school completers enrolled in college in 1990, while 70 percent enrolled in college in 2009 (Snyder & Dillow, 2011). These trends amount to a 45 percent increase in the number of students age 16 to 24 who graduated from high school and enrolled in college the following year (Snyder & Dillow, 2011).

Table 7.6. United States Recent High School Completers and their Enrollment in College, 1990 – 2009

	High school completers[1]	Enrolled in college[2]	
	# (in thousands)	# (in thousands)	%
1990	2,362	1,420	60.1
1991	2,276	1,423	62.5
1992	2,397	1,483	61.9
1993	2,342	1,467	62.6
1994	2,517	1,559	61.9
1995	2,599	1,610	61.9
1996	2,660	1,729	65.0
1997	2,769	1,856	67.0
1998	2,810	1,844	65.6
1999	2,897	1,822	62.9
2000	2,756	1,745	63.3
2001	2,549	1,574	61.8
2002	2,796	1,824	65.2
2003	2,677	1,711	63.9
2004	2,752	1,835	66.7
2005	2,675	1,834	68.6
2006	2,692	1,776	66.0
2007	2,955	1,986	67.2
2008	3,151	2,161	68.6
2009	2,937	2,058	70.1

[1] Individuals ages 16 to 24 who graduated from high school or completed a GED during the preceding 12 months.

[2] Enrollment in college as of October of each year for individuals ages 16 to 24 who completed high school during the preceding 12 months.

SOURCE: Snyder & Dillow. (2011). Digest of Education Statistics 2010 (NCES 2011-015). Table 209.

Changing Landscape of Higher Education

The landscape of higher education has changed, with enrollment growth in 2-year colleges outpacing growth in 4-year colleges. While the for-profit sector is still relatively small, the sector has shown rapid growth, especially among older and minority students. In 1991 there were approximately 159,500 students enrolled in for-profit colleges nationally, encompassing only 1.3 percent of higher education enrollments. By 2009 for-profit colleges enrolled almost 1.6 million students, amounting to 9 percent of all higher education enrollments.

Student enrollment growth, by sector. Between 1991 and 2009, growth in the for-profit sector vastly outpaced growth in the private and public sectors. Overall enrollment in higher education grew 47.4 percent – 31.4 percent in private institutions, 36.8 percent in public institutions, and 894.0 percent in for-profit institutions. Among public institutions growth was greatest in the 2-year sector. See Table 7.7.

There was less growth in higher education in New York State. In particular there was much less growth in the for-profit sector in New York, although growth in the for-profit sector outpaced growth in the public and private sectors. In New York higher education enrollment grew 31.4 percent – 30.1 percent in private institutions, 29.7 percent at CUNY, 29.0 percent at the State University of New York (SUNY), and 89.0 percent in for-profit institutions. In contrast to the more pronounced growth among four-year institutions in the for-profit sector nationally, in New York the for-profit sector grew most among 2-year institutions. Another striking difference between New York and national trends was the relatively small growth among public 4-year institutions in New York. CUNY senior colleges grew 12.7 percent between 1991 and 2009, while SUNY 4-year institutions grew only 8.9 percent. See Table 7.8.

Table 7.7. Growth in Undergraduate Enrollment, Nationally, by Sector and Level, 1991 – 2009

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	% change 1991 to 2009
All Institutions	11,915,322	11,993,335	11,893,018	12,148,923	12,490,984	13,623,577	14,452,290	14,971,726	15,621,261	17,565,320	47.4%
Private	1,973,796	2,007,199	2,042,548	2,067,254	2,140,342	2,204,246	2,333,040	2,429,678	2,498,755	2,593,361	31.4%
4-year	1,956,091	1,989,225	2,018,985	2,047,037	2,118,233	2,179,237	2,304,343	2,399,400	2,467,365	2,558,594	30.8%
2-year	17,705	17,974	23,563	20,217	22,109	25,009	28,697	30,278	31,390	34,767	96.4%
For-Profit	159,496	179,830	281,302	324,007	389,877	501,234	658,260	884,502	1,027,730	1,585,366	894.0%
4-year	115,275	139,190	164,835	199,829	247,235	316,735	420,064	619,083	752,778	1,200,172	941.1%
2-year	44,221	40,640	116,467	124,178	142,642	184,499	238,196	265,419	274,952	385,194	771.1%
Public	9,782,030	9,806,306	9,731,143	9,839,187	10,038,175	10,918,097	11,460,990	11,657,546	12,094,776	13,386,593	36.8%
4-year	5,106,291	5,034,209	4,985,350	5,011,379	5,129,104	5,373,335	5,637,032	5,745,474	5,930,052	6,285,149	23.1%
2-year	4,675,739	4,772,097	4,745,793	4,827,808	4,909,071	5,544,762	5,823,958	5,912,072	6,164,724	7,101,444	51.9%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Table 7.8. Growth in Undergraduate Enrollment, New York Institutions, by Sector and Level, 1991 – 2009

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	% change 1991 to 2009
All NY Institutions	799,323	807,122	802,617	790,895	800,748	842,600	923,688	949,877	978,046	1,050,501	31.4%
NY Private	274,569	280,076	283,554	287,319	296,479	288,936	332,629	343,529	346,539	357,221	30.1%
4-year	270,105	275,343	278,259	282,621	292,040	284,720	327,585	337,824	340,609	350,588	29.8%
2-year	4,464	4,733	5,295	4,698	4,439	4,216	5,044	5,705	5,930	6,633	48.6%
NY For-Profit	25,504	25,042	30,337	30,150	33,747	39,062	42,680	43,258	41,833	48,197	89.0%
4-year	15,365	14,041	16,123	17,230	19,357	22,236	21,455	23,671	23,581	26,621	73.3%
2-year	10,139	11,001	14,214	12,920	14,390	16,826	21,225	19,587	18,252	21,576	112.8%
SUNY	324,735	320,843	309,615	298,186	303,532	344,924	365,571	372,162	386,159	418,811	29.0%
4-year	174,966	167,043	162,811	157,758	161,491	166,625	171,846	174,169	181,968	190,459	8.9%
2-year	149,769	153,800	146,804	140,428	142,041	178,299	193,725	197,993	204,191	228,352	52.5%
CUNY	174,515	181,161	179,111	175,240	166,990	169,678	182,808	190,928	203,515	226,272	29.7%
CUNY Senior	78,782	79,460	77,826	74,238	70,907	70,095	73,793	76,607	83,115	88,791	12.7%
CUNY Comprehensive	33,234	34,901	35,288	36,642	35,128	36,085	38,712	41,006	43,536	48,711	46.6%
CUNY Community	62,499	66,800	65,997	64,360	60,955	63,498	70,303	73,315	76,864	88,770	42.0%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Growth in number of institutions, by sector. There has been a rapid expansion in the number of for-profit institutions serving undergraduates. Between 1991 and 2009 an additional 926 for-profit institutions reported enrolling undergraduates, while there were just 192 additional public institutions reporting enrollment. The majority of new for-profit and public institutions were 2-year institutions. Overall, there were fewer private institutions in 2009 compared to in 1991, although the number of private 2-year institutions did increase. See Table 7.9.

In New York State, the number of public institutions reporting undergraduate enrollment increased by just two institutions between 1991 and 2009. In contrast, an additional 19 for-profit institutions in New York reported enrollment in 2009. With this growth in the number of institutions comes student enrollment growth. For example, ASA Institute of Business and Computer Technology, a 2-year for-profit institution located in midtown Manhattan and Brooklyn, first reported 980 students to IPEDS in 2001, while in 2009 reported enrolling 4,582 students, an enrollment increase of 368 percent. See Table 7.10.

Table 7.9. Number of Institutions of Higher Education, by Sector and Level, 1991 – 2009

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	Change, 1991 to 2009
# Institutions	3,092	3,180	3,266	3,515	3,445	3,739	3,865	3,986	4,108	4,198	1,106
Public	1,464	1,511	1,529	1,573	1,582	1,622	1,635	1,638	1,651	1,656	192
4-year	646	647	648	652	644	646	649	651	652	657	11
2-year	818	864	881	921	938	976	986	987	999	999	181
Private	1,403	1,418	1,456	1,432	1,295	1,322	1,343	1,362	1,382	1,391	-12
4-year	1,359	1,376	1,405	1,380	1,229	1,243	1,260	1,277	1,297	1,306	-53
2-year	44	42	51	52	66	79	83	85	85	85	41
For-Profit	225	251	281	510	568	795	887	986	1,075	1,151	926
4-year	143	163	179	263	277	337	382	432	480	524	381
2-year	82	88	102	247	291	458	505	554	595	627	545

Note: Institutions were counted if enrollment was reported to IPEDS.

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Table 7.10. Number of Institutions of Higher Education in New York, by Sector and Level, 1991 – 2009

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	Change, 1991 to 2009
# Institutions	256	254	262	273	260	269	271	274	277	278	22
Public	76	76	76	76	75	77	77	78	78	78	2
4-year	43	43	43	43	42	42	42	43	43	43	0
2-year	33	33	33	33	33	35	35	35	35	35	2
Private	156	154	162	163	147	149	151	153	155	157	1
4-year	145	143	147	147	130	132	133	135	137	139	-6
2-year	11	11	15	16	17	17	18	18	18	18	7
For-Profit	24	22	22	32	38	43	43	43	44	43	19
4-year	12	10	10	13	16	16	16	16	17	17	5
2-year	12	12	12	19	22	27	27	27	27	26	14

Note: Institutions were counted if enrollment was reported to IPEDS.

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Growth by age, by sector. Nationally, enrollment growth in private and public institutions was greatest among students age 19 and under, while enrollment growth for students age 30 to 39 was lowest in the private sector and declined in the public sector. In contrast, the for-profit sector grew rapidly among students age 25 and older. The number of students age 30 to 39 enrolled in public 4-year institutions declined 19.1 percent between 1993 and 2009 (from 518,475 to 419,579), while the number of such students increased 1,437.3 percent in for-profit 4-year institutions (from 22,023 to 338,568). See Table 7.11.

Table 7.11. % Change in Undergraduate Enrollment, Nationally, by Sector, Level, and Age, 1993 – 2009

	19 & under	20 - 24	25 - 29	30 - 39	40 & over	Age unknown
All Institutions	73.7%	44.8%	45.7%	16.4%	46.3%	-66.9%
Private	43.9%	39.7%	14.6%	1.0%	36.8%	-79.7%
4-year	43.7%	39.3%	13.0%	-0.3%	35.7%	-79.7%
2-year	71.0%	108.5%	130.9%	86.8%	109.9%	-63.4%
For-Profit	224.8%	584.4%	1141.5%	1285.1%	1985.4%	-4.7%
4-year	142.0%	476.9%	1149.3%	1437.3%	2298.1%	-16.1%
2-year	542.7%	1042.8%	1114.4%	859.9%	1180.8%	17.7%
Public	79.0%	37.4%	24.9%	-6.8%	21.6%	-56.5%
4-year	52.1%	27.1%	8.7%	-19.1%	-1.1%	-62.1%
2-year	114.3%	55.1%	37.5%	-0.2%	31.0%	-54.1%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

In New York State, enrollment growth between 1993 and 2009 was greatest among students age 19 and under in the public, private, and for-profit sectors. The number of older students increased in the for-profit and private sectors, while the number of older students declined sharply in the public sector. See Table 7.12.

Table 7.12. % Change in Undergraduate Enrollment, New York Institutions, by Sector, Level, and Age, 1993 – 2009

	19 & under	20 - 24	25 - 29	30 - 39	40 & over	Age unknown
All NY Institutions	91.1%	41.0%	9.7%	-13.6%	13.5%	-97.4%
NY Private	89.9%	48.8%	13.8%	17.9%	64.1%	-97.8%
4-year	89.8%	48.3%	11.6%	18.1%	67.9%	-97.9%
2-year	109.9%	95.7%	66.3%	15.3%	5.3%	-82.5%
NY For-Profit	147.8%	100.8%	114.3%	73.1%	89.9%	-91.0%
4-year	151.5%	83.5%	81.3%	63.6%	59.8%	-73.8%
2-year	140.5%	130.0%	160.8%	82.9%	122.2%	-92.0%
SUNY	75.2%	33.9%	3.9%	-27.4%	5.7%	-85.1%
4-year	27.1%	21.5%	-6.6%	-32.1%	-0.6%	-85.5%
2-year	131.7%	55.2%	11.5%	-24.9%	9.1%	-84.8%
CUNY	129.6%	34.8%	-0.8%	-29.6%	-29.4%	-99.1%
CUNY Senior	92.3%	26.6%	-2.3%	-30.2%	-38.0%	-99.8%
CUNY Comprehensive	177.4%	41.6%	-3.5%	-30.3%	-8.4%	-84.4%
CUNY Community	144.3%	41.6%	2.4%	-28.5%	-30.7%	-92.4%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Growth by race/ethnicity, by sector. Nationally and in New York, between 1995 and 2009 Hispanic students increased more rapidly that other student groups in public, for-profit 2-year, and private 4-year institutions. Both nationally and in New York the number of Black students increased more rapidly than other student groups in for-profit 4-year and private 2-year institutions. Nationally, in 1995 just 24,700 Black undergraduates were enrolled in for-profit 4-year institutions, while in 2009 there were 250,460 Black undergraduates enrolled in for-profit 4-year institutions. See Tables 7.13 and 7.14.

Table 7.13 % Change in Undergraduate Enrollment, Nationally, by Sector, Level, and Race, 1995 – 2009

	Asian	Black	Hispanic	White	Unknown
All Institutions	55.2%	83.9%	116.5%	18.7%	298.3%
Private	42.2%	52.5%	82.7%	9.1%	173.8%
4-year	41.8%	51.0%	82.4%	9.1%	170.8%
2-year	83.8%	154.2%	102.6%	5.7%	3806.7%
For-Profit	286.9%	683.6%	483.1%	241.6%	3405.3%
4-year	334.8%	914.0%	555.3%	326.8%	7163.7%
2-year	210.4%	386.7%	396.3%	115.5%	637.1%
Public	52.9%	64.3%	106.6%	14.9%	220.7%
4-year	53.9%	40.8%	99.2%	8.5%	164.4%
2-year	52.0%	88.0%	111.4%	22.2%	266.9%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

At CUNY enrollment growth was strongest among Asian students. Growth was much less strong for Black students at CUNY compared to other public institutions in New York – growth among Black students decline 12.4 percent at CUNY senior colleges while such students increased 22.4 percent at SUNY 4-year institutions. Interestingly, the number of White students enrolled in for-profits declined 22.8 percent over the period (from 16,368 to 12,632). See Table 7.14.

Table 7.14. % Change in Undergraduate Enrollment, New York Institutions, by Sector, Level, and Race, 1995 – 2009

	Asian	Black	Hispanic	White	Unknown
All NY Institutions	57.0%	31.2%	58.7%	9.5%	185.0%
NY Private	42.3%	26.3%	46.2%	5.4%	213.4%
4-year	42.0%	24.1%	45.3%	5.8%	211.0%
2-year	53.5%	115.4%	105.8%	-11.8%	365.0%
NY For-Profit	58.1%	126.2%	131.4%	-22.8%	905.6%
4-year	60.5%	130.4%	119.2%	-20.9%	37575.0%
2-year	55.3%	121.8%	148.2%	-24.9%	332.6%
SUNY	34.5%	69.3%	111.0%	15.9%	139.0%
4-year	12.4%	22.4%	47.3%	-3.4%	189.4%
2-year	107.4%	118.3%	196.9%	36.0%	88.6%
CUNY	90.2%	6.6%	39.4%	6.2%	0.0%
CUNY Senior	67.3%	-12.4%	19.9%	3.3%	0.0%
CUNY Comprehensive	129.4%	20.9%	72.0%	14.7%	0.0%
CUNY Community	118.9%	15.9%	44.5%	4.6%	0.0%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Growth by full-time/part-time status, by sector. Between 1991 and 2009 undergraduates attending full-time grew more rapidly compared to part-time students in the public and private sectors, while part-time students grew more rapidly in for-profit colleges. There were fewer part-time students enrolled in public and private 4-year institutions in 2009 compared to 1991. See Table 7.15.

Table 7.15. % Change in Undergraduate Enrollment, Nationally, by Sector, Level, and Full-time/Part-time Status, 1991 – 2009

	Full-time	Part-time
All Institutions	60.3%	29.3%
Private	41.6%	-2.1%
4-year	41.2%	-3.5%
2-year	87.4%	118.0%
For-Profit	882.3%	934.5%
4-year	827.6%	1438.5%
2-year	1054.0%	182.6%
Public	46.6%	25.3%
4-year	32.0%	-0.7%
2-year	80.5%	37.1%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Overall, in New York full-time students grew more rapidly than part-time students in all sectors of higher education. However, there was more enrollment growth among part-time students in 2-year private and 2-year for-profit colleges. The number of part-time students expanded just 2.5 percent in the 4-year for-profit sector in New York, a stark contrast to the rapid expansion of part-time students in 4-year for-profit institutions nationally. Part-time students declined much more significantly in public 4-year institutions in New York compared to national trends. Part-time students declined less significantly at CUNY senior colleges (15.4 percent) compared to SUNY 4-year institutions (37.3 percent). See Table 7.16.

Table 7.16. % Change in Undergraduate Enrollment, New York Institutions, by Sector, Level, and Full-time/Part-time Status, 1991 – 2009

	Full-time	Part-time
All NY Institutions	43.2%	6.6%
NY Private	34.6%	15.3%
4-year	34.4%	14.1%
2-year	44.2%	54.5%
NY For-Profit	101.5%	40.5%
4-year	97.4%	2.5%
2-year	106.8%	153.0%
SUNY	45.7%	-0.7%
4-year	23.3%	-37.3%
2-year	85.9%	19.5%
CUNY	44.5%	8.4%
CUNY Senior	31.1%	-15.4%
CUNY Comprehensive	77.6%	6.2%
CUNY Community	44.8%	38.2%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Changing age profile, by sector. Nationally and in New York the proportion of enrolled undergraduates who were age 25 and older declined between 1993 and 2009. This decline was more pronounced in New York where there was a 6.9 percentage point decline among students age 25 and older compared to a 3.0 percentage point decline nationally. Nationally, older students declined most in public institutions (7.1 percentage points), and especially within public 2-year institutions (9.7 percentage points). The proportion of older students in public institutions in New York declined more significantly (15.3 percentage points at CUNY, 9.8 percentage points at SUNY). Consistent with national trends, in New York the proportion of older students declined most in public institutions with associate programs. The proportion of older students attending for-profit institutions in New York remained stable, while the proportion of older students in for-profit institutions nationally increased 26.0 percentage points. See Tables 7.17 and 7.18.

Table 7.17. Percent of Students Age 25 and Older, Nationally, by Sector and Level, 1993 and 2009

	% 25 and Over	
	1993	2009
All Institutions	35.8%	32.8%
Private	25.0%	22.3%
4-year	24.8%	22.0%
2-year	41.2%	44.1%
For-Profit	39.5%	65.6%
4-year	38.2%	70.0%
2-year	44.0%	51.8%
Public	38.0%	30.9%
4-year	26.7%	20.5%
2-year	49.8%	40.2%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Table 7.18. Percent of Students Age 25 and Older, NY Institutions, by Sector and Level, 1993 and 2009

	% 25 and Over	
	1993	2009
All NY Institutions	31.6%	24.6%
NY Private	21.1%	21.5%
4-year	20.3%	20.8%
2-year	66.6%	59.3%
NY For-Profit	43.0%	43.0%
4-year	41.4%	37.2%
2-year	45.1%	50.2%
SUNY	33.1%	23.3%
4-year	23.7%	17.7%
2-year	43.3%	27.9%
CUNY	43.6%	28.2%
CUNY Senior	40.8%	28.7%
CUNY Comprehensive	45.5%	27.5%
CUNY Community	45.8%	28.3%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Changing race/ethnicity profile, by sector. Nationally, the proportion of enrolled undergraduates who were Asian remained approximately the same between 1995 and 2009, while the proportion of Black students increased 2.8 percentage points, the proportion of Hispanic students increased 4.0 percentage points, the proportion of White students declined 12.9 percentage points, and the proportion of students with unknown race/ethnicity increased 5.5 percentage points. In the for-profit sector, the proportion of Black students increased 6.1 percentage points and the proportion of White students declined 24.7 percentage points between 1995 and 2009. However, it should be noted that the proportion of undergraduates in the for-profit sector with unknown race/ethnicity increased 19.7 percentage points. See Table 7.19.

Table 7.19. Percent of Asian, Black, Hispanic, White, and Unknown Undergraduates, by Sector and Level, 1995 and 2009

	% Asian		% Black		% Hispanic		% White		% Unknown	
	1995	2009	1995	2009	1995	2009	1995	2009	1995	2009
All Institutions	5.5%	5.8%	10.5%	13.3%	8.1%	12.1%	69.5%	56.6%	3.2%	8.6%
Private	4.6%	5.2%	9.7%	11.6%	4.7%	6.7%	72.2%	62.0%	4.5%	9.8%
4-year	4.7%	5.2%	9.7%	11.5%	4.6%	6.7%	72.2%	62.1%	4.6%	9.8%
2-year	3.6%	4.5%	11.7%	20.1%	6.3%	8.6%	72.0%	51.6%	0.3%	8.4%
For-Profit	3.8%	2.6%	15.6%	21.7%	11.3%	11.7%	62.7%	38.0%	3.8%	23.5%
4-year	4.0%	2.4%	15.0%	20.9%	10.5%	9.5%	63.8%	37.4%	2.7%	27.3%
2-year	3.6%	3.4%	16.5%	24.2%	12.4%	18.6%	61.1%	39.8%	5.3%	11.7%
Public	5.7%	6.3%	10.6%	12.6%	8.8%	13.2%	69.1%	57.8%	2.8%	6.6%
4-year	5.5%	6.7%	10.4%	11.6%	6.7%	10.6%	72.0%	61.9%	2.5%	5.2%
2-year	5.9%	6.0%	10.8%	13.5%	11.0%	15.5%	66.3%	54.1%	3.2%	7.9%

Note: Percentages do not sum to 100% because a small proportion of American Indian, Nonresident Alien, and those with two or more races not reflected.

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

While nationally there was a slight increase in the proportion of Black students, in New York the proportion of Black students remained unchanged between 1995 and 2009. However, in the private 2-year sector and in the for-profit sector the proportion of Black students increased. While there was a slight increase in the proportion of Black students in SUNY, there was a 4.8 percentage point decline in the proportion of Black students at CUNY and a 6.2 percentage point decline at the CUNY senior colleges particularly. CUNY was also unique in New York State in having a substantial increase in the proportion of Asian students. The proportion of Hispanics increased most in the for-profit sector, and the proportion of Whites decreased most in the private 2-year and for-profit sectors. See Table 7.20.

Table 7.20. Percent of Asian, Black, Hispanic, White, and Unknown Undergraduates, New York Institutions, by Sector and Level, 1995 and 2009

	% Asian		% Black		% Hispanic		% White		% Unknown	
	1995	2009	1995	2009	1995	2009	1995	2009	1995	2009
All NY Institutions	6.3%	7.6%	14.1%	14.1%	10.5%	12.7%	61.8%	51.7%	4.1%	8.9%
NY Private	6.6%	7.4%	9.8%	9.8%	7.1%	8.3%	67.2%	56.3%	5.3%	13.2%
4-year	6.5%	7.4%	9.7%	9.6%	7.1%	8.2%	67.1%	56.4%	5.4%	13.3%
2-year	9.0%	11.0%	12.8%	22.0%	5.9%	9.7%	70.9%	49.9%	0.0%	5.5%
NY For-Profit	4.1%	4.1%	21.1%	30.1%	16.4%	23.9%	54.0%	26.2%	1.7%	10.8%
4-year	4.1%	4.0%	20.4%	28.5%	17.9%	23.7%	53.7%	25.7%	0.0%	11.3%
2-year	4.1%	4.2%	22.0%	32.1%	14.8%	24.2%	54.3%	26.8%	3.6%	10.3%
SUNY	4.4%	4.4%	7.6%	9.5%	4.6%	7.2%	76.1%	65.2%	5.6%	9.9%
4-year	6.4%	6.2%	7.4%	7.7%	5.1%	6.4%	74.0%	61.1%	5.3%	13.2%
2-year	2.1%	2.9%	7.8%	11.0%	4.2%	8.0%	78.5%	68.6%	5.9%	7.2%
CUNY	9.7%	14.6%	30.9%	26.1%	24.8%	27.4%	29.7%	25.0%	0.0%	0.0%
CUNY Senior	13.0%	19.1%	26.5%	20.4%	21.7%	22.9%	33.4%	30.2%	0.0%	0.0%
CUNY Comprehensive	6.0%	10.0%	38.6%	33.8%	19.3%	24.1%	33.5%	27.9%	0.0%	0.0%
CUNY Community	7.8%	12.8%	31.9%	27.5%	31.4%	33.8%	23.4%	18.2%	0.0%	0.0%

Note: Percentages do not sum to 100% because a small proportion of American Indian, Nonresident Alien, and those with two or more races not reflected.

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Changing part-time status profile, by sector. Nationally and in New York the proportion of part-time students declined between 1991 and 2009 (5.1 and 6.1 percentage points, respectively). The proportion of part-time students increased in the private 2-year sector (3.2 percentage points nationally, 1.7 percentage points in New York). Nationally, the proportion of part-time students increased 8.9 percentage points in the for-profit 4-year sector and decreased 21.9 percentage points in the for-profit 2-year sector. In contrast, in New York the proportion of part-time students decreased 10.4 percentage points in the for-profit 4-year sector and increased 2.5 percentage points in the for-profit 2-year sector. There was a significant decline in the proportion of part-time students in public institutions in New York (a sharper decline than public institutions nationally), with the exception of CUNY community colleges where the proportion of part-time students declined just 1.1 percentage points. See Tables 7.21 and 7.22.

Table 7.21. Percent of Part-time Undergraduates, Nationally, by Sector and Level, 1991 and 2009

	% Part-time	
	1991	2009
All Institutions	41.7%	36.6%
Private	23.3%	17.4%
4-year	23.2%	17.1%
2-year	29.2%	32.5%
For-Profit	22.4%	23.3%
4-year	18.6%	27.5%
2-year	32.5%	10.5%
Public	45.7%	41.8%
4-year	27.2%	22.0%
2-year	65.9%	59.4%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Table 7.22. Percent of Part-time Undergraduates, New York Institutions, by Sector and Level, 1991 and 2009

	% Part-time	
	1991	2009
All NY Institutions	32.2%	26.1%
NY Private	23.1%	20.5%
4-year	22.8%	20.0%
2-year	43.0%	44.7%
NY For-Profit	20.5%	15.2%
4-year	25.4%	15.0%
2-year	13.0%	15.5%
SUNY	36.0%	27.7%
4-year	23.8%	13.7%
2-year	50.3%	39.4%
CUNY	41.1%	34.4%
CUNY Senior	39.6%	29.7%
CUNY Comprehensive	43.4%	31.4%
CUNY Community	41.8%	40.6%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Public and For-Profit Sectors, a Closer Analysis

Approximately 23 degree-granting for-profit institutions of higher education serving almost 39,000 students are within 25 miles of New York City. For-profit institutions within New York City serving more than 3,000 students include ASA Institute of Business and Computer Technology, Berkeley College, Monroe College, School of Visual Arts, and Technical Career Institutes. These institutions are likely to attract undergraduate students who might otherwise attend a CUNY college. See Table 7.23.

As shown in Table 7.24, many of the demographic shifts at CUNY are contrary to shifts in the for-profit sector in New York City. This suggests that particular student groups are more frequently enrolling in for-profit colleges, and these same groups have declining representation at CUNY. For example, while students age 25 and older declined at CUNY between 1995 and 2009, enrollment of such students increased in the for-profit sector in NYC. The number of Black students declined 14.1 percent at CUNY senior colleges, while Black students increased 125.7 percent at NYC 4-year for-profit institutions. White students declined in the for-profit sector while they increased at CUNY.

The expanding for-profit sector in New York City does not account entirely for the demographic shifts at CUNY. For example, between 1995 and 2009 there was a 19.8 percent decrease in the number of students age 25 and older attending CUNY. Even if all students age 25 and older who were enrolled in for-profit institutions had instead attended a CUNY college, there still would have been a 10.3 percent decrease. If all students attending for-profits in NYC had instead attended CUNY, there would have been a 15.7 percent increase in the number of Black students rather than the more modest 5.9 percent increase, and among Hispanic students there would have been an increase of 47.6 percent rather than 38.6 percent. Interestingly, the NYC for-

profit sector did not seem to have an impact on the number of students attending part-time. See Table 7.25.

The rising for-profit sector in New York City is just one factor, although possibly an important factor, in the demographic shifts that occurred at CUNY. Nationally, it also appears the rising for-profit sector had an impact on enrollment patterns within public institutions. New York residents may choose to enroll in for-profit institutions based in other states that offer online programs, and so these national patterns should be considered when examining changing demographics at CUNY.

Nationally, if student enrollment in the for-profit sector had instead been concentrated in public institutions, enrollment growth in the public sector would have been 49.5 percent between 1995 and 2009 rather than 37.6 percent, enrollment of students age 25 and older would have increased 38.1 percent rather than 12.8 percent, enrollment of Black students would have increased 89.7 percent rather than 64.3 percent, and enrollment of Hispanic students would have increased 120.1 percent rather than 106.6 percent. See Table 7.26.

Table 7.23. Degree-Granting For-Profits within 25 Miles of New York City

	Name	City	Type	Undergraduate students
1	ASA Institute of Business and Computer Technology	Brooklyn	2-year, Private for-profit	5,804
2	Business Informatics Center Inc	Valley Stream	2-year, Private for-profit	131
3	Long Island Business Institute	Flushing	2-year, Private for-profit	610
4	Mandl The College of Allied Health	NYC	2-year, Private for-profit	718
5	New York Career Institute	NYC	2-year, Private for-profit	805
6	St Paul's School of Nursing-Queens	Flushing	2-year, Private for-profit	271
7	St Paul's School of Nursing-Staten Island	Staten Island	2-year, Private for-profit	293
8	Technical Career Institutes	NYC	2-year, Private for-profit	4,491
9	The Art Institute of New York City	NYC	2-year, Private for-profit	1,491
10	Wood Tobe-Coburn School	NYC	2-year, Private for-profit	483
11	Briarcliffe College	Bethpage	4-year, primarily associate's, Private for-profit	1,922
12	Globe Institute of Technology	NYC	4-year, primarily associate's, Private for-profit	580
13	Monroe College-Main Campus	Bronx	4-year, primarily associate's, Private for-profit	4,349
14	Plaza College	Jackson Heights	4-year, primarily associate's, Private for-profit	793
15	Swedish Institute a College of Health Sciences	NYC	4-year, primarily associate's, Private for-profit	543
16	The College of Westchester	White Plains	4-year, primarily associate's, Private for-profit	1,219
17	Berkeley College - Westchester Campus	White Plains	4-year, Private for-profit	
18	Berkeley College-New York	NYC	4-year, Private for-profit	5,202
19	DeVry College of New York	NYC	4-year, Private for-profit	1,841
20	LIM College	NYC	4-year, Private for-profit	1,496
21	Monroe College-New Rochelle	New Rochelle	4-year, Private for-profit	1,976
22	Pacific College of Oriental Medicine-New York	NYC	4-year, Private for-profit	131
23	School of Visual Arts	NYC	4-year, Private for-profit	3,650

SOURCE: National Center for Education Statistics, College Navigator, Generated at:10/15/2011 12:25:56 PM from URL:http://nces.ed.gov/collegenavigator

Table 7.24. Enrollment in NYC For-Profits and CUNY Colleges, 1995 and 2009

	1995	2009	Change, 1995 to 2009
NYC For-Profits, 4-year	13,447	22,362	66.3%
25 and over	4,831	7,892	63.4%
Asian	639	1,021	59.8%
Black	2,837	6,402	125.7%
Hispanic	2,778	6,019	116.7%
White	6,605	4,352	-34.1%
Part-time	2,861	2,892	1.1%
NYC For-Profits, 2-year	7,627	13,367	75.3%
25 and over	2,606	6,220	138.7%
Asian	522	818	56.7%
Black	2,121	4,754	124.1%
Hispanic	1,739	4,578	163.3%
White	2,710	1,382	-49.0%
Part-time	380	1,514	298.4%
CUNY Senior Colleges	77,826	87,674	12.7%
25 and over	32,751	24,426	-25.4%
Asian	10,118	16,875	66.8%
Black	20,652	17,741	-14.1%
Hispanic	16,925	20,030	18.3%
White	25,966	26,377	1.6%
Part-time	28,893	25,492	-11.8%
CUNY Comprehensive	35,288	48,711	38.0%
25 and over	15,891	13,378	-15.8%
Asian	2,120	4,863	129.4%
Black	13,630	16,480	20.9%
Hispanic	6,813	11,717	72.0%
White	11,835	13,574	14.7%
Part-time	12,131	15,316	26.3%
CUNY Community	65,997	88,770	34.5%
25 and over	29,799	25,084	-15.8%
Asian	5,179	11,335	118.9%
Black	21,076	24,417	15.9%
Hispanic	20,740	29,966	44.5%
White	15,437	16,146	4.6%
Part-time	25,857	36,070	39.5%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Table 7.25. Enrollment in CUNY, NYC For-Profits, and CUNY/NYC For-Profits Combined, 1995 and 2009

	1995	2009	Change, 1995 to 2009
CUNY	179,111	225,155	25.7%
25 and over	78,441	62,888	-19.8%
Asian	17,417	33,073	89.9%
Black	55,358	58,638	5.9%
Hispanic	44,478	61,713	38.7%
White	53,238	56,097	5.4%
Part-time	66,881	76,878	14.9%
NYC For-Profits	21,074	35,729	69.5%
25 and over	7,437	14,112	89.8%
Asian	1,161	1,839	58.4%
Black	4,958	11,156	125.0%
Hispanic	4,517	10,597	134.6%
White	9,315	5,734	-38.4%
Part-time	3,241	4,406	35.9%
CUNY and NYC For-Profits Combined	200,185	260,884	30.3%
25 and over	85,878	77,000	-10.3%
Asian	18,578	34,912	87.9%
Black	60,316	69,794	15.7%
Hispanic	48,995	72,310	47.6%
White	62,553	61,831	-1.2%
Part-time	70,122	81,284	15.9%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Table 7.26. National Enrollment in Public, For-Profit, and Public/For-Profit Combined, 1995 and 2009

	1995	2009	Change, 1995 to 2009
Public	9,731,143	13,386,593	37.6%
25 and over	3,672,278	4,141,676	12.8%
Asian	553,164	845,943	52.9%
Black	1,027,634	1,688,571	64.3%
Hispanic	854,648	1,765,921	106.6%
White	6,728,216	7,731,938	14.9%
Part-time	4,368,711	5,601,690	28.2%
For-Profit	281,302	1,585,366	463.6%
25 and over	80,210	1,039,829	1196.4%
Asian	10,827	41,890	286.9%
Black	43,860	343,708	683.6%
Hispanic	31,825	185,584	483.1%
White	176,380	602,451	241.6%
Part-time	35,405	370,124	945.4%
Public and For-Profits Combined	10,012,445	14,971,959	49.5%
25 and over	3,752,488	5,181,505	38.1%
Asian	563,991	887,833	57.4%
Black	1,071,494	2,032,279	89.7%
Hispanic	886,473	1,951,505	120.1%
White	6,904,596	8,334,389	20.7%
Part-time	4,404,116	5,971,814	35.6%

Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 2009 Fall Enrollment Survey

Chapter 8. Applications, Admissions, and Demographic Change at CUNY

As discussed in Chapter 7, the student body at CUNY has changed in relation to changes among city residents, high school graduates, and the expanding for-profit sector of higher education. But demographic changes have also occurred as a result of the university's own policies and practices. CUNY has worked actively to recruit academically qualified students and has adopted higher admissions standards. Beginning in 1999 students deemed in need of remediation were no longer allowed to enroll in senior colleges, and many senior colleges have further increased admissions standards. For example, in 2005 Baruch required incoming students to have a total SAT score of 1050, while in 2012 the standard had increased to 1110. Similarly, incoming Hunter students needed a total SAT score of 930 in 2005, while they needed an SAT score of 1030 in 2012.

Related to these changing policies and practices, this chapter will explore the following research questions:

1. What have been the trends among first-time freshmen applying to CUNY? Have applicants from particular groups increased or decreased? Have applicants to the senior, comprehensive, or community colleges increased or decreased?
2. Are particular student groups more likely to be offered admission to their first choice college? Are particular student groups more likely to be offered admission to a community college versus a senior or comprehensive college?
3. How have the academic credentials of first-time freshmen applicants changed over time, and how have the academic credentials of admitted students at each college changed over time?

Data come from the CUNY Application System (CAS) and include first-time freshmen (FTF) applicants. CAS does not include transfer students or readmitted students who attended the college previously but withdrew. Students may apply to up to six CUNY colleges using a common application. Students are then matched to the college they ranked highest for which they meet the admissions criteria. Particular student groups, such as adult students who may have enrolled previously in higher education, may be more likely to apply to CUNY as transfer students or readmits. Such students are not reflected in the data presented here.

Key Findings – Trends among First-time Freshmen Applicants

- The number of students applying to CUNY as first-time freshmen remained relatively flat between 1990 and 2000, while there was significant growth between 2000 and 2010.
- Over the study period, first-time freshmen applicants most frequently listed a senior college as their first choice for admission. In 2010, similar numbers of students were enrolled in senior and community colleges. However, far fewer first-time freshmen applicants listed a community college as their first choice for admission compared to those who listed a senior college as their first choice.
- Over the 20-year period, the number of older students applying as first-time freshmen declined 55.4 percent CUNY-wide, while the number of younger applicants grew substantially. With the exception of applicants to BMCC and LaGuardia between 1990 and 2000, the number of applicants age 25 and older declined in every CUNY college throughout the study period.
- Between 1990 and 2008, first-time freshmen applications among Asians and Hispanics grew, while there was a decline in the number of Black and White applicants. Among all

groups except Asians, the number of applicants listing a community college as their first-choice declined between 1990 and 2008.

- Considering applications to the senior colleges, over the 18-year period the number of Black applicants to Baruch declined while there were increases in applicants to the college among all other racial/ethnic subgroups. At City and Hunter, the number of applicants from all racial/ethnic subgroups expanded, but growth was smallest among Black applicants.

Key Findings – Offers of Admission

- Admissions to the senior colleges became increasingly competitive throughout the study period, with admissions rates especially declining between 2000 and 2010. Among students listing a senior college as their first choice, 61.0 percent were admitted to their first choice college in 1990, compared to 53.5 percent in 2000 and just 37.3 percent in 2010.
- The admissions rate to BMCC, the largest community college which is centrally located in lower Manhattan, declined from 98.9 percent in 2000 to just 81.0 percent in 2010. By 2010, many students listing BMCC as their first choice were instead offered admission at a different community college.
- Among students listing a senior college as their first choice, older students were less likely to be offered admission than younger students. While the admissions rate was similar for younger and older students listing a senior college as their first choice in 1990 (61.3 percent for younger students compared to 56.7 percent for older students), by 2000 there was a gap of 21.6 percentage points.

- Among applicants to senior colleges, 55.3 percent of White applicants and 52.9 percent of Asian applicants were offered admission to their first choice college in 2008, compared to an admissions rate of just 30.1 percent for Hispanic applicants and just 26.7 percent for Black applicants. The gap in the admissions rate between Black and Hispanic applicants and other applicants grew wider over the study period.
- Among applicants listing a senior college as their first choice, just 51.8 percent were allocated to any senior college in 2010, down from 71.3 percent in 1990. Applicants to senior colleges who were older, Black, and Hispanic were least likely to be allocated to a senior college.

Key Findings – Academic Credentials

- Over time, the College Admissions Average (CAA), total SAT score, and total academic credits accumulated during high school have gradually increased among CUNY first-time freshmen applicants.
- The academic credentials of older students were on average lower than the credentials of younger students. Between 1990 and 2010 the academic credentials of older applicants did not increase as substantially as they did for younger applicants. Over this time period the average CAA of older applicants remained stable, the total SAT score declined, and the total number of high school credits increased but by a smaller margin than they did for younger students.
- On average, the academic credentials of Black and Hispanic applicants were lower than those of Asian and White applicants, and the gap between the academic credentials of Black and Hispanic applicants and other applicants grew wider over time. For example,

in 1996 White applicants had an average total SAT score that was 104 points higher than Black applicants and 102 points higher than Hispanic applicants. In 2008 White applicants had average SAT scores that were 175 points higher than Black applicants and 163 points higher than Hispanic applicants.

- Substantial differences can be seen in the average academic credentials of students allocated to senior colleges versus community colleges. Over the study period, CUNY senior colleges showed an increase in the average credentials of allocated students. Between 1996 and 2010 there was more than a 100 point increase in the average SAT scores of students allocated to City and Lehman, more than a 150 point increase of students allocated to Hunter, and more than a 200 point increase of students allocated to Baruch. In contrast, the average SAT score of students allocated to comprehensive and community colleges showed little change.

Trends among First-time Freshmen Applicants

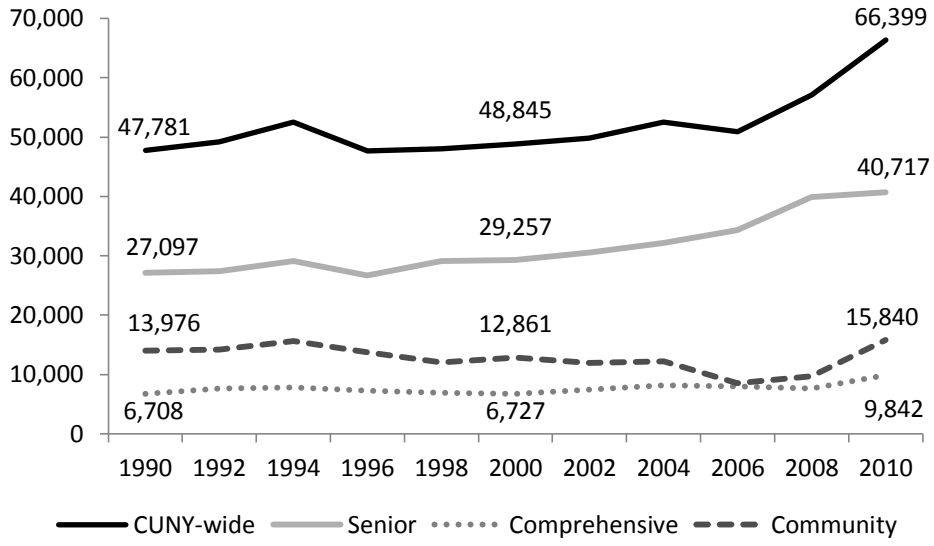
Over time, increasing numbers of students applied to CUNY as first-time freshmen and applicants were increasingly likely to select a senior college as their first choice for admission. Older applicants and those who were Black or White did not increase as rapidly as applicants who were younger, Asian, or Hispanic. Based on the number of first-time freshmen applicants listing each college as their first choice, the desirability of some CUNY colleges expanded more quickly than others. As a result of the differential growth of particular applicant groups, the distribution of applicants by age and race/ethnicity has changed over time such that the CUNY colleges have a significantly different pool of applicants to choose from than they did 20 years ago.

Growth overall. Although there was approximately a 10 percent increase in first-time freshmen (FTF) applicants between 1990 and 1994, the number of applicants began to decline between 1994 and 2000. There was an 8 percent decline in the number of applicants listing a CUNY community college as their first choice college between 1990 and 2000, while there was an 8 percent increase in applicants listing a senior college as their first choice during this time period.

Between 2000 and 2010 the number of applicants grew by 35.9 percent with a significant amount of the growth occurring between 2006 and 2010. The number of applicants listing a comprehensive college as their first choice grew 46.3 percent, those listing a senior college grew 39.2 percent, and those listing a community college grew 23.2 percent.

Applicants most frequently listed a senior college as their first choice for admission. As we saw in Chapter 6 (Figure 6.1), in 2010 similar numbers of students were enrolled in senior and community colleges. In contrast, far fewer first-time freshmen applicants listed a community college as their first choice for admission than those who listed a senior college as their first choice. See Figure 8.1.

Figure 8.1. CUNY FTF Applicants, by Level



Growth by age. Although the number of applicants was relatively flat between 1990 and 2000, this was largely due to a decline in the number of older students applying to CUNY as first-time freshmen. Declines in the number of applicants age 25 and older are apparent, regardless of whether the first-choice college was a senior, comprehensive, or community college. Over the 20-year period the number of older students applying as first-time freshmen declined 55.4 percent CUNY-wide (from 7,655 to 3,417), 66.5 percent among applicants to senior colleges, 66.2 percent among applicants to comprehensive colleges, and 46.3 percent among applicants to community colleges. Declines among older applicants were apparent after 1994. In contrast, the number of younger students applying as first-time freshmen grew substantially over the 20-year period, with most growth occurring after 2000.

Figure 8.2. CUNY FTF Applicants, by Age, Total University

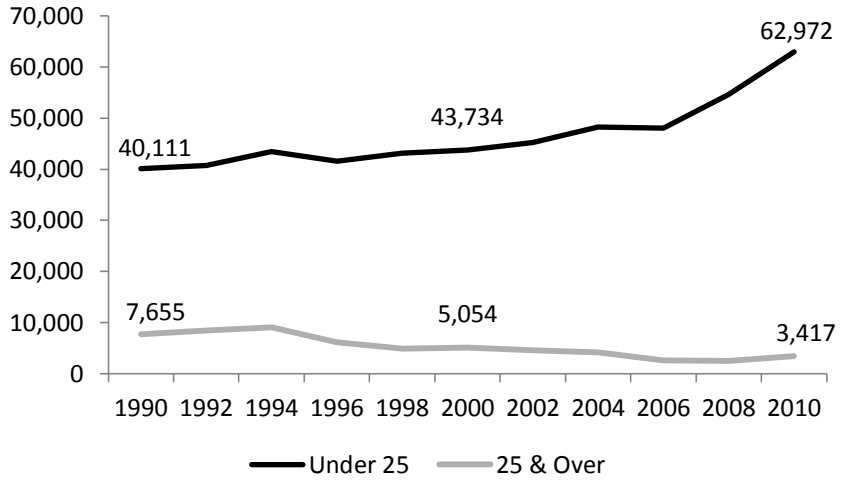


Figure 8.3. CUNY FTF Applicants, by Age, Community Colleges

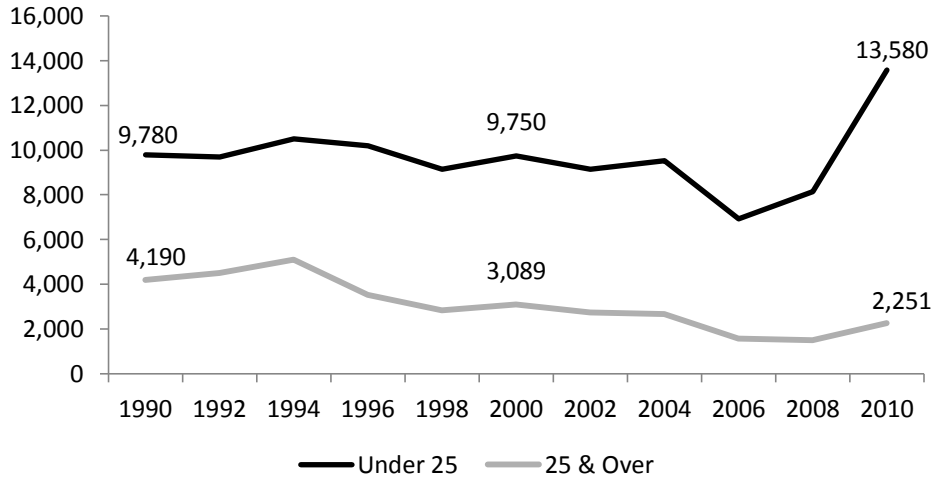


Figure 8.4. CUNY FTF Applicants, by Age, Comprehensive Colleges

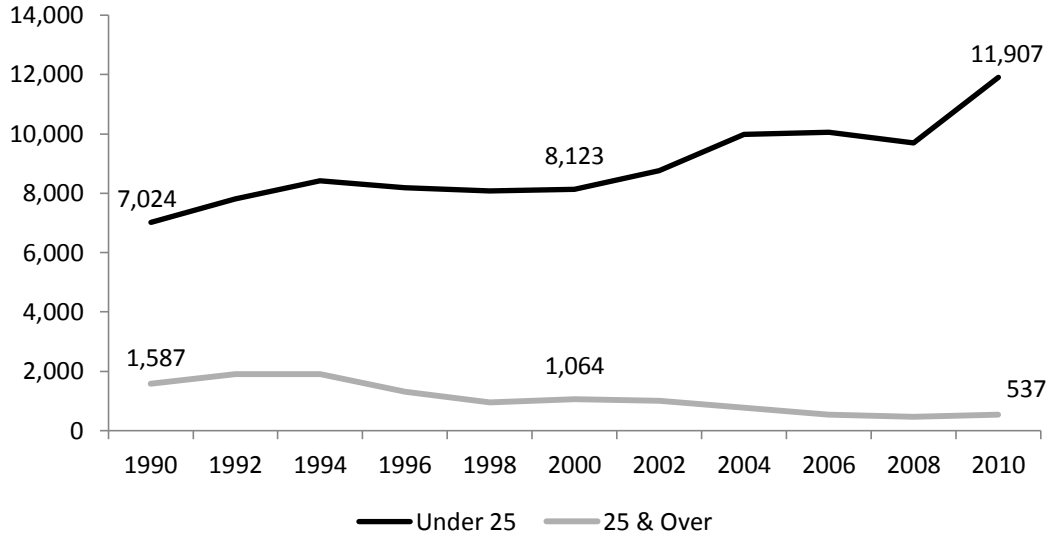
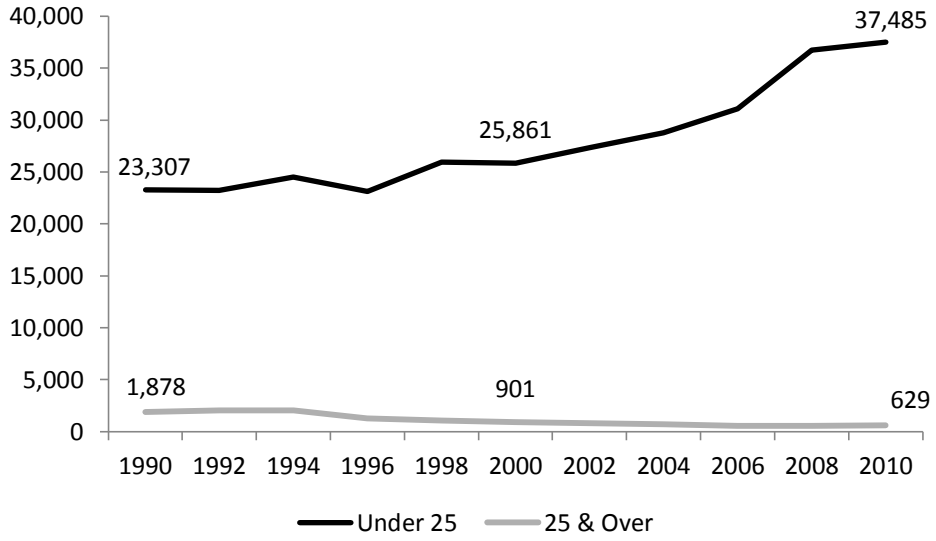


Figure 8.5. CUNY FTF Applicants, by Age, Senior Colleges



Growth by race/ethnicity. Between 1990 and 2008[9] first-time freshmen applications grew most among Asian and Hispanic applicants, with the number of such applicants increasing

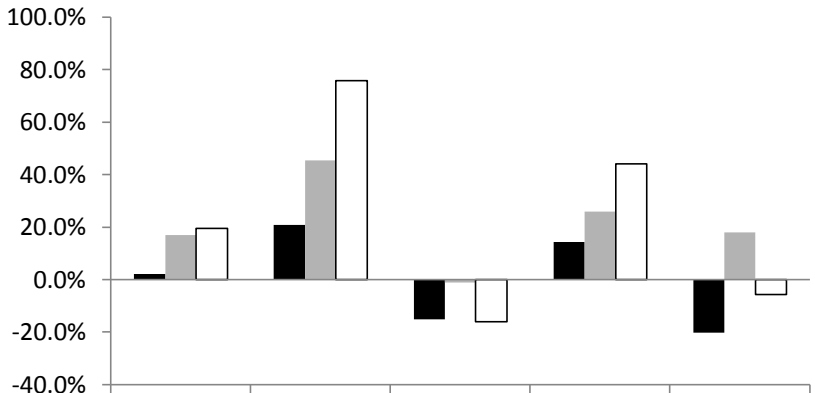
[9] At the time of the study, first-time freshmen application data for particular racial/ethnic subgroups was not available for the year 2010.

more substantially after 2000. The number of Black and White applicants decreased between 1990 and 2000. Between 2000 and 2008 the number of White applicants grew while there was still a slight decline in the number of Black applicants. Over the 18-year period the number of Black applicants declined from 13,828 to 11,614, while the number of White applicants declined from 12,323 to 11,614. See Figure 8.6.

Among all groups except Asian applicants, the number of applicants listing a community college as their first-choice declined between 1990 and 2008. The decline was steepest among White applicants, followed by Black and Hispanic applicants. In contrast, most first-time freshmen applicants to CUNY listed a senior college as their first choice. Black applicants to the senior colleges increased just 6.5 percent over the 18-year period, the smallest increase of any subgroup. See Figure 8.7. and Figure 8.9.

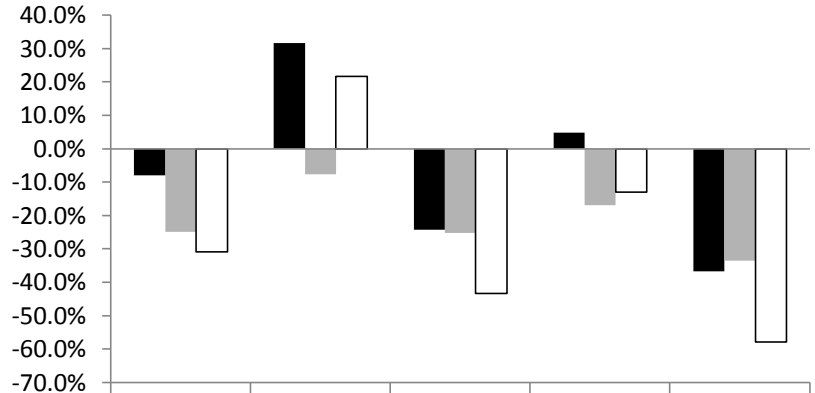
Demand for enrollment among first-time freshmen applicants at the comprehensive colleges increased most among Hispanic and Asian applicants. The number of White applicants to the comprehensive colleges increased just 3.6 percent between 1990 and 2008 – such applicants declined between 1990 and 2000 but then increased between 2000 and 2008. The number of Black applicants to comprehensive colleges declined 22.3 percent over the 18-year period, from 3,053 to 2,371 applicants. See Figure 8.8.

Figure 8.6. % Change in CUNY FTF Applicants, by Race/Ethnicity, Total University



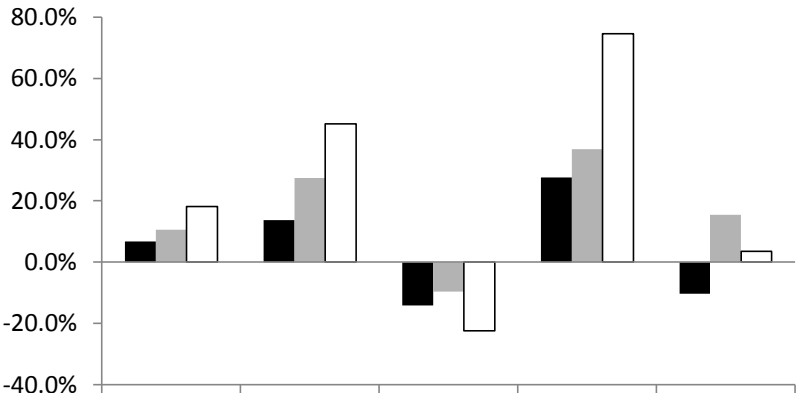
	All	Asian	Black	Hispanic	White
1990 to 2000	2.2%	20.9%	-15.1%	14.4%	-20.2%
2000 to 2008	17.0%	45.5%	-1.1%	26.0%	18.1%
1990 to 2008	19.6%	75.9%	-16.0%	44.1%	-5.8%

Figure 8.7. % Change in CUNY FTF Applicants, by Race/Ethnicity, Community Colleges



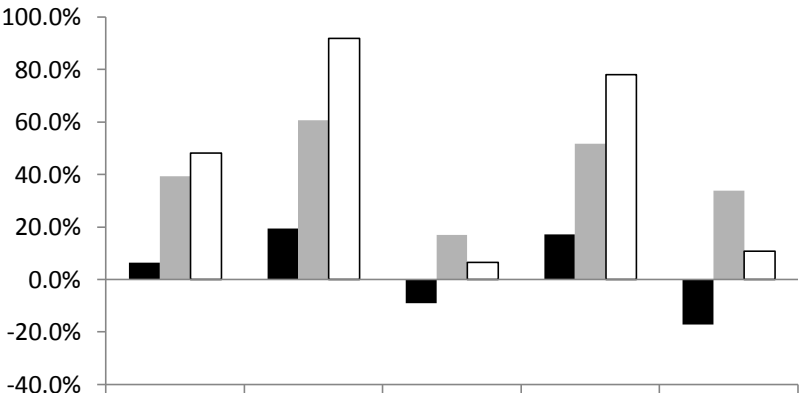
	All	Asian	Black	Hispanic	White
1990 to 2000	-8.0%	31.6%	-24.3%	4.8%	-36.7%
2000 to 2008	-24.9%	-7.6%	-25.2%	-17.0%	-33.4%
1990 to 2008	-30.9%	21.6%	-43.4%	-13.0%	-57.9%

Figure 8.8. % Change in CUNY FTF Applicants, by Race/Ethnicity, Comprehensive Colleges



	All	Asian	Black	Hispanic	White
1990 to 2000	6.8%	13.7%	-14.2%	27.6%	-10.3%
2000 to 2008	10.6%	27.6%	-9.5%	36.9%	15.5%
1990 to 2008	18.1%	45.1%	-22.3%	74.6%	3.6%

Figure 8.9. % Change in CUNY FTF Applicants, by Race/Ethnicity, Senior Colleges



	All	Asian	Black	Hispanic	White
1990 to 2000	6.3%	19.4%	-9.0%	17.3%	-17.1%
2000 to 2008	39.3%	60.7%	17.1%	51.8%	33.8%
1990 to 2008	48.1%	92.0%	6.5%	78.0%	10.8%

Growth overall, by first choice college. Between 1990 and 2010, there was more than a 130 percent increase in applicants listing Hunter as their first choice, an increase of almost 125 percent among applicants listing John Jay as their first choice, and an increase of almost 85

percent among applicants listing City as their first choice. There was less than a 10 percent increase in the number of applicants listing Brooklyn, NYCCT, and Kingsborough, and a decline of 11.4 percent among applicants listing Queensborough as their first choice. See Table 8.1.

Table 8.1. % Change of CUNY FTF Applicants, by First Choice College, 1990 – 2010

	% Change		
First Choice College	1990 - 2000	2000 - 2010	1990 - 2010
Senior			
Baruch	10.5%	9.3%	20.7%
Brooklyn	-17.8%	24.2%	2.0%
City	-8.7%	102.5%	84.8%
Hunter	38.5%	69.2%	134.5%
Lehman	2.4%	49.3%	53.0%
Queens	9.7%	12.7%	23.6%
York	-27.1%	83.7%	34.0%
Comprehensive			
John Jay	19.3%	88.1%	124.5%
Medgar Evers	1.9%	19.8%	22.1%
NYCCT	-12.4%	15.1%	0.8%
Staten Island	29.8%	5.3%	36.6%
Community			
BMCC	-0.1%	22.1%	22.0%
Bronx	2.6%	45.1%	48.9%
Hostos	-23.8%	45.9%	11.2%
Kingsborough	-18.0%	28.7%	5.5%
LaGuardia	7.1%	6.3%	13.8%
Queensborough	-23.1%	15.2%	-11.4%

SOURCE: CUNY Admission System

Growth by age, by first choice college. With the exception of applicants to BMCC and LaGuardia between 1990 and 2000, the number of applicants age 25 and older declined to every CUNY college throughout the study period. Over the 20-year period there was more than a 70 percent decline in the number of students age 25 and older applying to Baruch, John Jay, Medgar Evers, NYCCT, Queens, and York. See Table 8.2.

Table 8.2. % Change of CUNY FTF Applicants Age 25 and Older, by First Choice College, 1990 – 2010

	% Change, Age 25 and Older		
First Choice College	1990 - 2000	2000 - 2010	1990 - 2010
Senior			
Baruch	-40.8%	-54.6%	-73.1%
Brooklyn	-41.2%	-9.3%	-46.7%
City	-50.7%	-32.6%	-66.8%
Hunter	-43.8%	-26.3%	-58.6%
Lehman	-53.2%	-22.0%	-63.5%
Queens	-76.0%	-5.6%	-77.4%
York	-80.1%	-36.0%	-87.3%
Comprehensive			
John Jay	-61.8%	-35.5%	-75.4%
Medgar Evers	-64.7%	-57.5%	-85.0%
NYCCT	-59.4%	-47.2%	-78.6%
Staten Island	-21.6%	-51.4%	-61.8%
Community			
BMCC	21.2%	-28.3%	-13.1%
Bronx	-14.8%	-27.8%	-38.4%
Hostos	-46.8%	-29.9%	-62.7%
Kingsborough	-37.8%	-14.5%	-46.8%
LaGuardia	284.9%	-26.7%	182.3%
Queensborough	-34.2%	-36.4%	-58.1%

SOURCE: CUNY Admission System

Growth by race/ethnicity, by first choice college. Depending on the first choice college selected, there were large differences in first-time freshmen applicant growth among particular racial/ethnic subgroups. Out of the 17 undergraduate colleges included in the analysis, the number of White applicants declined at 10 colleges, Black applicants declined at 9 colleges, Hispanic applicants declined at 5 colleges, and Asian applicants declined at 4 colleges.

There was a range in Black applicant growth from -58.7 percent at LaGuardia to 65.2 percent at Staten Island. Hispanic applicant growth ranged from -40.4 percent at Hostos to 201.5 percent at Staten Island. White applicant growth ranged from -78.3 percent at Queensborough to 145.1 percent at Hunter. The percentage increase among Asian applicants was also greatest at Hunter.

Considering applications to the senior colleges, over the 18-year period Black applicants to Baruch declined while there were increases in applicants to the college among all other racial/ethnic subgroups. At City and Hunter, the number of applicants from all racial/ethnic subgroups expanded, but growth was smallest among Black applicants. At Brooklyn, Lehman, and Queens the number of White applicants declined, while growth in the number of Hispanic and Asian applicants outpaced growth among Black applicants. There was also a large decline in the number of Black applicants to York. See Table 8.3.

Table 8.3. % Change of CUNY FTF Applicants, by Race/Ethnicity and First Choice College, 1990 – 2008

	% Change, Asian Students			% Change, Black Students			% Change, Hispanic Students			% Change, White Students		
First Choice College	1990 - 2000	2000 - 2008	1990 - 2008	1990 - 2000	2000 - 2008	1990 - 2008	1990 - 2000	2000 - 2008	1990 - 2008	1990 - 2000	2000 - 2008	1990 - 2008
Senior												
Baruch	15.6%	60.0%	85.0%	-26.8%	2.4%	-25.0%	14.9%	29.9%	49.3%	15.6%	27.2%	47.0%
Brooklyn	-9.3%	56.8%	42.3%	-0.5%	19.9%	19.4%	-3.8%	57.6%	51.6%	-43.7%	-5.6%	-46.8%
City	-26.4%	110.6%	55.0%	-17.0%	25.5%	4.2%	4.4%	88.4%	96.7%	-12.0%	167.1%	135.0%
Hunter	57.1%	117.1%	241.1%	5.8%	19.0%	26.0%	37.6%	57.6%	116.9%	44.6%	69.5%	145.1%
Lehman	36.4%	29.3%	76.4%	6.5%	41.8%	51.1%	11.7%	52.3%	70.1%	-63.4%	13.3%	-58.6%
Queens	83.3%	-10.2%	64.6%	42.8%	4.3%	48.9%	25.9%	31.4%	65.4%	-32.3%	16.6%	-21.0%
York	-41.6%	33.3%	-22.1%	-42.0%	5.1%	-39.1%	5.2%	40.5%	47.7%	-40.5%	28.0%	-23.8%
Comprehensive												
John Jay	78.1%	100.0%	256.3%	-13.9%	48.3%	27.7%	40.3%	73.7%	143.8%	6.2%	47.7%	56.9%
Medgar Evers	-33.3%	-20.0%	-46.7%	-5.6%	-45.8%	-48.9%	0.0%	40.5%	40.5%	-50.0%	125.0%	12.5%
NYCCT	0.4%	9.6%	10.0%	-23.6%	-30.6%	-47.0%	2.7%	-3.2%	-0.5%	-50.1%	6.8%	-46.7%
Staten Island	16.2%	9.3%	26.9%	50.6%	9.7%	65.2%	134.8%	28.4%	201.5%	-1.3%	3.2%	1.9%
Community												
BMCC	27.2%	-7.9%	17.2%	-30.0%	-31.8%	-52.3%	14.4%	-8.5%	4.7%	36.8%	-26.2%	0.9%
Bronx	-39.5%	46.2%	-11.6%	-28.0%	-9.0%	-34.5%	40.3%	-16.4%	17.3%	-17.0%	-35.9%	-46.8%
Hostos	100.0%	106.3%	312.5%	1.3%	34.2%	35.9%	-25.6%	-19.9%	-40.4%	-22.2%	21.4%	-5.6%
Kingsborough	80.0%	11.8%	101.3%	-6.9%	-15.6%	-21.4%	-14.9%	1.3%	-13.8%	-42.7%	-24.3%	-56.6%
LaGuardia	24.0%	-21.6%	-2.7%	-26.4%	-43.9%	-58.7%	19.5%	-32.1%	-18.9%	-10.5%	-43.6%	-49.6%
Queensborough	40.3%	-13.1%	22.0%	-26.4%	-35.7%	-52.7%	-14.2%	-6.4%	-19.7%	-57.3%	-49.1%	-78.3%

Note: Race/ethnicity data was missing or categorized as "Other" for approximately 16.4 percent of applicants in 1990, 10.5 percent in 2000, and 14.7 percent in 2008.

SOURCE: CUNY Admission System

Changing age profile, by first choice college. Between 1990 and 2010 the average age of first-time freshmen applicants declined at every CUNY college. The steepest decline occurred at Hostos, where the average age of applicants listing the college as their first choice declined by approximately 5 years, from 27.8 to 22.8. Over the 20-year period, the average age of applicants listing Medgar Evers as their first choice declined by 4.9 years, and the average age of applicants listing BMCC, Bronx, and York as their first choice declined by more than 3 years. See Table 8.4.

Table 8.4. Average Age of CUNY FTF Applicants, by First Choice College, 1990, 2000, 2010

	Average Age		
First Choice College	1990	2000	2010
Senior			
Baruch	19.4	18.9	18.6
Brooklyn	19.2	19.0	18.8
City	20.0	19.3	18.7
Hunter	19.5	18.9	18.6
Lehman	21.2	19.7	19.0
Queens	19.7	18.7	18.7
York	23.0	21.3	19.5
Comprehensive			
John Jay	20.1	19.2	18.7
Medgar Evers	25.8	25.8	20.9
NYCCT	22.2	21.1	19.8
Staten Island	21.1	20.1	19.2
Community			
BMCC	24.1	22.4	21.0
Bronx	24.9	24.2	21.7
Hostos	27.8	27.2	22.8
Kingsborough	22.8	22.0	21.0
LaGuardia	23.7	23.3	22.0
Queensborough	21.8	21.6	20.4

SOURCE: CUNY Admission System

Changing race/ethnicity profile, by first choice college. The distribution of first-time freshmen applicants has also changed substantially in terms of the race/ethnicity of students applying to CUNY. It should be noted that the race/ethnicity of approximately 15 percent of all applicants was missing or categorized as "other" in 2008, and approximately 11 percent of all applicants were categorized as such in 1990. Due to the increase in the proportion of applicants with missing or "other" race/ethnicity, caution should be used when examining changes over time.

The proportion of applicants who were Asian increased at most colleges. Between 1990 and 2008 the proportion of Asian applicants listing Queensborough as their first choice increased 10 percentage points, and the proportion of Asian applicants listing Baruch, Hunter, and Kingsborough as their first choice increased by approximately 6 percentage points. In contrast, the proportion of Black applicants generally declined or remained stable. For instance, between 1990 and 2008 there was an 18 percentage point decline in the proportion of Black applicants listing BMCC as their first choice. While 49.3 percent of all first-time freshmen applicants to BMCC were Black in 1990, just 31.6 percent were Black in 2008. Similarly, there was more than a 10 percentage point decline in the proportion of Black applicants to Baruch, Bronx, City, Hunter, John Jay, LaGuardia, NYCCT, Medgar Evers, and York. The only college to experience a substantial increase in the proportion of Black applicants was Hostos. The proportion of Hispanic applicants generally increased over the 18-year period. The proportion of White applicants declined substantially at Brooklyn, Kingsborough, Lehman, Queens, Queensborough, and Staten Island. See Table 8.5.

Table 8.5. Race/Ethnicity of CUNY FTF Applicants, by First Choice College, 1990, 2000, 2008

	% Asian			% Black			% Hispanic			% White		
First Choice College	1990	2000	2008	1990	2000	2008	1990	2000	2008	1990	2000	2008
Senior												
Baruch	23.2%	24.3%	29.3%	25.0%	16.6%	12.8%	22.1%	23.0%	22.5%	20.8%	21.8%	21.0%
Brooklyn	9.2%	10.2%	13.5%	19.9%	24.1%	24.4%	11.2%	13.1%	17.3%	51.2%	35.1%	27.9%
City	20.6%	16.6%	19.3%	32.8%	29.8%	20.6%	27.2%	31.1%	32.3%	8.3%	8.0%	11.8%
Hunter	11.5%	13.0%	17.7%	31.4%	24.0%	17.9%	26.2%	26.0%	25.7%	20.9%	21.9%	23.2%
Lehman	3.4%	4.5%	4.1%	28.2%	29.3%	29.1%	44.6%	48.6%	51.8%	13.9%	5.0%	3.9%
Queens	12.5%	20.8%	17.2%	7.7%	10.0%	9.6%	13.4%	15.4%	18.6%	55.1%	34.0%	36.4%
York	10.7%	8.6%	9.9%	54.2%	43.1%	39.1%	14.7%	21.2%	25.8%	4.0%	3.3%	3.6%
Comprehensive												
John Jay	2.7%	4.0%	5.1%	33.1%	23.9%	22.4%	32.8%	38.6%	42.6%	21.7%	19.3%	18.1%
Medgar Evers	2.2%	1.4%	2.0%	77.8%	72.0%	67.5%	6.2%	6.0%	14.6%	1.2%	0.6%	2.2%
NYCCT	7.6%	8.8%	11.2%	43.2%	37.7%	30.4%	25.2%	29.5%	33.3%	13.8%	7.8%	9.7%
Staten Island	6.8%	6.1%	6.4%	8.3%	9.6%	10.2%	6.9%	12.5%	15.5%	68.8%	52.3%	52.1%
Community												
BMCC	6.8%	8.6%	10.6%	49.3%	34.5%	31.6%	25.2%	28.9%	35.4%	6.0%	8.2%	8.1%
Bronx	2.9%	1.7%	2.9%	42.1%	29.5%	31.8%	39.2%	53.6%	52.9%	3.1%	2.5%	1.9%
Hostos	0.7%	1.8%	3.7%	13.2%	17.5%	23.5%	74.7%	72.9%	58.4%	1.5%	1.6%	1.9%
Kingsborough	3.1%	6.7%	9.2%	24.6%	27.9%	28.6%	14.2%	14.7%	18.1%	46.5%	32.5%	29.9%
LaGuardia	9.8%	11.4%	14.5%	27.5%	18.9%	17.2%	37.0%	41.3%	45.5%	13.1%	10.9%	10.0%
Queensborough	7.6%	13.8%	17.6%	23.4%	22.3%	21.0%	20.1%	22.4%	30.8%	35.6%	19.7%	14.7%

Note: Race/ethnicity data was missing or categorized as "Other" for approximately 16.4 percent of applicants in 1990, 10.5 percent in 2000, and 14.7 percent in 2008.

SOURCE: CUNY Admission System

Offers of Admission

CUNY applicants are not always allocated to their first choice college. Allocation depends on whether applicants meet particular admissions requirements which vary across CUNY and are based on academic criteria including high school grades, high school course taking, and SAT scores. Applicants must also meet proficiency requirements in math, reading, and writing for admission to a bachelor's program. Applicants may list up to six colleges and are matched to the college they rank highest for which they meet the admissions requirements. If applicants are denied enrollment at all colleges listed on their application they are offered enrollment at another college in the system, usually a community college (The City University of New York, Office of Institutional Research and Assessment, 2012c).

Admission to the senior colleges became increasingly competitive throughout the study period, with admission rates especially declining between 2000 and 2010. Among students listing a senior college as their first choice, 61.0 percent were admitted to their first choice college in 1990, compared to 53.5 percent in 2000 and only 37.3 percent in 2010. Between 1990 and 2010 the admission rate declined by more than 30 percentage points at Brooklyn and York, and by more than 50 percentage points at Lehman. In 1990, 71.8 percent of students listing Lehman as their first choice were allocated to the college compared to just 18.2 percent in 2010. Brooklyn, Lehman, and York are situated in areas with high rates of poverty and educational disadvantage, and so it is possible that students listing these colleges as their first choice often do not meet admissions standards and are allocated instead to less selective institutions. See Table 8.6.

Students listing a senior college as their first choice were increasingly allocated to community colleges. In 2010, 14.9 percent of students listing Lehman as their first choice were

allocated to BMCC, 20.5 percent were allocated to Bronx Community College, and 9.0 percent were allocated to Hostos Community College. The admission rate to comprehensive and community colleges also declined over the study period. John Jay, which became a senior college late in the study period, had a substantial drop in the admission rate. The admission rate to BMCC, the largest community college which is centrally located in lower Manhattan, declined from 98.9 percent in 2000 to just 81.0 percent in 2010. By 2010, many students listing BMCC as their first choice were instead offered admission to a different community college. See Table 8.7.

Among students listing a senior college as their first choice, older students were less likely to be offered admission than younger students. The gap in the admission rate between older and younger students grew wider over the study period, particularly between 1990 and 2000. For example, while the admission rate was similar for younger and older students listing a senior college as their first choice in 1990 (61.3 percent for younger students compared to 56.7 percent for older students), by 2000 there was a gap of 21.6 percentage points. Considering admission to the comprehensive colleges, by 2010 older students were less likely than younger students to be offered admission to John Jay, NYCCT, and Staten Island. See Table 8.8.

Black and Hispanic applicants were typically less likely to be allocated to a first choice senior college than Asian or White applicants. This was true at all senior colleges and John Jay in 2008. Among applicants to senior colleges, 55.3 percent of White applicants and 52.9 percent of Asian applicants were offered admission to their first choice college in 2008, compared to an admission rate of only 30.1 percent for Hispanic applicants and 26.7 percent for Black applicants. The gap in the admissions rate between Black and Hispanic applicants and other applicants grew wider over time. In 1990 the gap in the admissions rate between Black and White applicants was 17 percentage points, compared to a gap of 28.6 percentage points in 2010.

The gap in the admissions rate between Hispanic and White applicants increased from 7.9 percentage points in 1990 to 25.2 percentage points in 2010. See Table 8.9.

Examining the ratio of allocations to first choice applications demonstrates that applicants have increasingly been allocated to comprehensive and community colleges. As senior colleges became more selective, applicants who did not meet admissions requirements were instead allocated to comprehensive or community colleges. Those offered admission to community colleges have increasingly outnumbered those listing a community college as their first choice. In 2010, more than twice as many applicants who listed Kingsborough and Queensborough as their first choice were allocated to those colleges, and more than three times as many applicants to Medgar Evers were allocated to the college. For example, while just 835 students listed Medgar Evers as their first choice college, 2,558 students were offered admission to the college. Many students are offered admission to colleges that they did not hope to attend, and students are particularly directed toward colleges with associate degree programs and away from senior colleges. See Table 8.10.

Table 8.11 further depicts the mismatch between the aspirations of students and their placement within the CUNY system. Among applicants listing a senior college as their first choice, just 51.8 percent were allocated to a senior college in 2010, down from 71.3 percent in 1990. Applicants listing Baruch and Queens as their first choice were most likely to be offered admission to a senior college, while applicants listing Lehman as their first choice were especially likely to be redirected toward a comprehensive or community college. Just 23.0 percent of applicants listing Lehman as their first choice were admitted to a senior college in 2010. Figures 8.10 and 8.11 demonstrate that applicants to senior colleges who were older,

Black, and Hispanic were least likely to be allocated to a senior college, with these groups experiencing large declines in the percentage allocated to senior colleges over time.

Table 8.6. Percent of FTF Applicants Allocated to College of First Choice, by First Choice College, 1990 – 2010

First Choice College	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
Senior	61.0%	59.1%	59.5%	52.4%	43.6%	53.5%	47.7%	48.7%	47.6%	41.4%	37.3%
Baruch	49.2%	55.8%	57.8%	50.4%	34.0%	43.8%	43.5%	44.4%	40.5%	34.5%	34.0%
Brooklyn	70.4%	66.3%	66.7%	62.8%	52.4%	64.1%	51.1%	49.6%	54.2%	44.6%	38.0%
City	64.9%	62.2%	60.2%	47.7%	46.7%	59.4%	57.4%	58.4%	61.2%	51.5%	42.5%
Hunter	47.4%	42.4%	47.2%	46.8%	41.7%	52.6%	40.8%	43.7%	41.6%	37.7%	35.6%
Lehman	71.8%	63.2%	54.1%	51.1%	39.7%	48.4%	43.8%	39.9%	36.2%	31.6%	18.2%
Queens	72.6%	68.9%	73.0%	56.3%	52.0%	55.6%	54.3%	57.6%	56.9%	49.1%	46.4%
York	75.5%	71.1%	70.3%	62.3%	44.2%	70.7%	69.7%	69.2%	55.1%	57.3%	43.2%
Comprehensive	91.6%	84.9%	86.8%	90.1%	88.4%	90.6%	86.8%	84.5%	84.8%	77.6%	67.9%
John Jay	87.2%	75.0%	71.1%	83.3%	73.1%	75.7%	76.9%	80.8%	79.0%	60.6%	47.7%
Medgar Evers	96.9%	96.1%	90.2%	91.6%	95.5%	96.7%	93.2%	80.5%	82.3%	91.3%	85.3%
NYCCT	90.3%	82.9%	91.8%	91.7%	96.5%	96.5%	90.2%	82.4%	84.2%	84.9%	78.7%
Staten Island	97.6%	97.4%	97.7%	96.6%	96.9%	98.1%	94.6%	94.0%	95.4%	97.1%	88.3%
Community	95.7%	95.8%	96.0%	96.0%	97.8%	98.3%	93.2%	92.7%	90.8%	93.2%	90.4%
BMCC	95.9%	96.5%	96.4%	96.5%	98.2%	98.9%	91.8%	90.9%	84.4%	90.1%	81.0%
Bronx	97.1%	97.7%	97.7%	97.0%	98.2%	98.5%	95.1%	94.1%	93.7%	95.8%	97.1%
Hostos	97.7%	97.6%	98.0%	97.5%	97.4%	98.8%	96.3%	94.5%	95.0%	93.5%	93.6%
Kingsborough	92.4%	95.4%	95.8%	97.1%	97.4%	97.7%	90.8%	91.2%	94.1%	95.5%	96.0%
LaGuardia	96.1%	95.7%	93.9%	92.7%	97.5%	98.0%	94.8%	93.9%	89.8%	91.7%	91.1%
Queensborough	96.6%	93.8%	95.7%	96.9%	97.9%	97.8%	93.3%	93.7%	92.4%	95.8%	92.3%

SOURCE: CUNY Admission System

Table 8.7. Percent of FTF Applicants Allocated to each College, by First Choice College and Allocated College, 1990 – 2010

Allocated College	First College Choice																				
	City			Baruch			Hunter			Lehman			Brooklyn			Queens			York		
	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010
City	64.9%	59.4%	42.5%	1.9%	2.4%	3.3%	5.8%	2.2%	3.8%	.4%	1.3%	.4%	.6%	.8%	1.1%	.3%	1.7%	2.1%	.1%	0.0%	0.0%
Baruch	.2%	.4%	.4%	49.2%	43.8%	34.0%	.9%	.2%	.7%	.1%	0.0%	0.0%	.1%	.2%	.2%	.1%	.6%	.3%	.1%	0.0%	0.0%
Hunter	1.9%	2.4%	1.5%	2.2%	4.0%	3.8%	47.4%	52.6%	35.6%	0.0%	.2%	.1%	.2%	.9%	.4%	.2%	4.2%	.9%	.1%	0.0%	0.0%
Lehman	2.0%	1.0%	1.9%	3.0%	2.8%	3.5%	3.8%	2.6%	3.7%	71.8%	48.4%	18.2%	.3%	.3%	.4%	.2%	.6%	.7%	0.0%	0.0%	.2%
Brooklyn	4.0%	3.8%	1.6%	5.0%	5.1%	4.5%	2.7%	2.4%	2.6%	.1%	.2%	.2%	70.4%	64.1%	38.0%	.5%	1.5%	.8%	.1%	.3%	.1%
Queens	1.7%	1.6%	1.1%	4.0%	1.6%	4.0%	3.2%	1.0%	1.9%	.1%	.1%	.2%	.5%	.4%	.5%	72.6%	55.6%	46.4%	.3%	.3%	.1%
York	.7%	1.1%	4.8%	2.4%	3.9%	5.6%	2.0%	2.3%	5.7%	.5%	1.0%	4.0%	.5%	1.0%	4.1%	2.1%	5.8%	6.7%	75.5%	70.7%	43.2%
John Jay	1.0%	1.6%	2.6%	1.7%	3.2%	5.2%	2.3%	2.9%	4.4%	1.3%	3.5%	3.4%	1.4%	1.6%	2.3%	.5%	2.4%	3.4%	.7%	.4%	.4%
Medgar Evers	.6%	1.5%	3.3%	1.3%	1.6%	2.8%	.9%	1.5%	4.2%	.4%	1.5%	6.5%	1.9%	3.4%	6.6%	.1%	.5%	1.8%	.7%	1.8%	6.4%
NYCCT	5.9%	7.3%	12.1%	4.3%	5.8%	6.0%	4.4%	3.9%	5.4%	1.1%	2.9%	6.3%	3.1%	4.6%	6.1%	1.4%	2.6%	3.4%	2.1%	2.3%	4.3%
Staten Island	1.5%	2.3%	3.6%	2.2%	3.0%	5.4%	1.8%	3.0%	5.6%	.5%	1.5%	3.2%	4.2%	4.5%	7.8%	.4%	1.0%	2.1%	.4%	.7%	1.7%
BMCC	5.6%	7.6%	6.9%	11.1%	11.2%	7.3%	10.4%	11.5%	7.3%	4.5%	10.1%	14.9%	2.9%	4.2%	6.1%	.7%	2.7%	2.8%	2.8%	2.7%	7.3%
Bronx	3.2%	3.4%	3.8%	1.3%	1.5%	1.8%	2.6%	2.0%	2.8%	14.1%	19.8%	20.5%	.2%	.6%	.8%	.2%	.3%	.7%	.1%	.5%	1.6%
Hostos	.4%	.7%	2.1%	.2%	.3%	.9%	.2%	.6%	1.5%	1.4%	2.8%	9.0%	.0%	.1%	.5%	0.0%	.1%	.2%	.1%	.1%	1.2%
LaGuardia	2.0%	2.0%	4.5%	3.4%	2.8%	3.6%	4.1%	4.3%	4.7%	2.3%	3.9%	6.7%	.8%	1.1%	3.6%	2.9%	3.7%	5.4%	5.6%	5.2%	10.1%
Kingsborough	1.8%	1.5%	3.1%	2.9%	3.0%	4.3%	3.4%	3.5%	4.2%	.4%	1.4%	3.2%	12.2%	11.0%	19.2%	.7%	1.0%	1.8%	.8%	2.7%	6.8%
Queensborough	2.7%	2.3%	4.4%	3.7%	4.0%	4.2%	4.0%	3.6%	5.9%	1.0%	1.6%	3.2%	.7%	1.2%	2.5%	17.1%	15.7%	20.4%	10.7%	12.2%	16.7%

SOURCE: CUNY Admission System

Table 8.8. Percent of FTF Applicants Allocated to First Choice College, by Age and First Choice College, 1990 – 2010

	Under 25			25 & Over		
First Choice College	1990	2000	2010	1990	2000	2010
Senior Colleges	61.3%	54.2%	37.7%	56.7%	32.6%	18.6%
Baruch	50.8%	44.7%	34.1%	21.4%	12.0%	21.7%
Brooklyn	71.6%	65.0%	38.4%	44.0%	34.6%	21.6%
City	65.4%	59.9%	42.8%	59.5%	48.1%	17.6%
Hunter	49.2%	53.4%	35.9%	19.4%	20.5%	15.1%
Lehman	70.3%	48.7%	18.3%	81.5%	44.0%	14.1%
Queens	71.9%	56.2%	46.9%	81.4%	15.5%	11.9%
York	68.5%	72.6%	44.0%	94.6%	60.8%	28.8%
Comprehensive	91.5%	90.3%	67.7%	91.9%	92.2%	71.9%
John Jay	86.9%	77.1%	47.9%	90.6%	41.1%	39.1%
Medgar Evers	95.5%	96.0%	83.9%	98.7%	97.8%	94.0%
NYCCT	91.2%	96.4%	79.5%	87.1%	97.2%	66.8%
Staten Island	97.3%	98.0%	88.6%	98.9%	99.5%	80.6%
Community	94.7%	98.1%	90.2%	98.0%	98.9%	91.5%
BMCC	95.1%	98.7%	80.9%	97.7%	99.5%	81.6%
Bronx	97.1%	98.5%	96.9%	97.0%	98.5%	97.7%
Hostos	96.6%	97.9%	93.2%	98.7%	99.8%	95.0%
Kingsborough	90.8%	97.7%	96.1%	97.4%	97.7%	95.4%
LaGuardia	95.0%	97.7%	90.5%	99.0%	98.8%	93.5%
Queensborough	96.2%	97.7%	92.5%	98.5%	98.4%	89.8%

SOURCE: CUNY Admission System

Table 8.9. Percent of FTF Applicants Allocated to First Choice College, by Race/Ethnicity and First Choice College, 1990 – 2008

	Asian			Black			Hispanic			White		
First Choice College	1990	2000	2008	1990	2000	2008	1990	2000	2008	1990	2000	2008
Senior	67.4%	58.4%	52.9%	50.7%	44.5%	26.7%	59.9%	46.6%	30.1%	67.7%	65.6%	55.3%
Baruch	60.5%	56.0%	45.9%	38.5%	28.1%	19.9%	48.1%	31.6%	21.4%	53.0%	56.7%	43.0%
Brooklyn	81.7%	71.0%	54.9%	56.3%	49.2%	27.8%	68.2%	58.5%	34.7%	75.1%	73.8%	56.4%
City	72.6%	64.4%	70.3%	57.1%	57.3%	42.0%	66.0%	60.3%	39.7%	70.3%	66.3%	68.1%
Hunter	55.9%	58.9%	52.7%	40.2%	40.9%	16.1%	49.4%	46.6%	25.0%	52.5%	68.4%	54.9%
Lehman	81.8%	58.7%	50.5%	65.4%	48.4%	26.9%	75.4%	46.2%	30.9%	71.4%	60.2%	47.9%
Queens	74.5%	52.7%	49.5%	60.6%	39.4%	26.4%	67.7%	46.6%	31.9%	74.4%	64.6%	62.3%
York	85.8%	80.3%	64.8%	72.2%	68.6%	51.4%	79.4%	68.7%	61.1%	78.6%	84.0%	87.5%
Comprehensive	89.1%	92.4%	85.2%	91.4%	90.1%	71.6%	90.3%	86.8%	70.3%	94.0%	94.7%	90.6%
John Jay	89.1%	75.4%	68.4%	84.8%	69.5%	49.9%	88.3%	74.6%	57.0%	88.9%	87.6%	80.0%
Medgar Evers	93.3%	100.0%	87.5%	97.6%	97.8%	92.3%	85.7%	92.9%	89.8%	87.5%	100.0%	77.8%
NYCCT	86.4%	95.7%	90.6%	92.0%	97.3%	83.3%	91.7%	97.0%	85.4%	88.3%	92.0%	88.1%
Staten Island	94.6%	98.7%	98.2%	96.2%	95.8%	96.2%	93.2%	98.1%	96.0%	98.2%	98.2%	97.7%
Community	96.0%	98.0%	94.5%	95.3%	98.1%	91.4%	95.4%	98.5%	93.3%	96.3%	98.5%	96.1%
BMCC	96.2%	98.0%	96.8%	96.4%	99.3%	87.6%	94.9%	99.0%	89.3%	93.4%	97.9%	91.6%
Bronx	97.7%	92.3%	94.7%	98.4%	98.2%	93.0%	95.6%	99.0%	97.5%	93.6%	97.4%	100.0%
Hostos	87.5%	93.8%	97.0%	95.5%	96.8%	94.8%	98.9%	99.2%	93.4%	77.8%	100.0%	88.2%
Kingsborough	87.5%	96.5%	96.3%	88.4%	97.8%	92.8%	85.6%	96.8%	95.3%	96.5%	98.8%	97.9%
Queensborough	99.6%	98.8%	89.6%	94.9%	96.6%	90.6%	96.5%	98.5%	92.6%	93.6%	98.4%	95.4%
LaGuardia	94.2%	98.5%	95.3%	96.4%	96.8%	95.7%	94.7%	96.3%	95.3%	98.3%	98.4%	96.9%

Note: Race/ethnicity data was missing or categorized as "Other" for approximately 16.4 percent of applicants in 1990, 10.5 percent in 2000, and 14.7 percent in 2008.

SOURCE: CUNY Admission System

Table 8.10. Ratio of Allocations to First Choice Applications, by First Choice College, 1990 – 2010

First Choice College	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	All Years, 1990-2010*
Senior	0.72	0.68	0.69	0.65	0.57	0.66	0.64	0.66	0.63	0.59	0.52	0.63
Baruch	0.50	0.58	0.61	0.55	0.35	0.45	0.47	0.48	0.41	0.36	0.36	0.46
Brooklyn	0.85	0.76	0.81	0.80	0.70	0.84	0.69	0.65	0.73	0.65	0.56	0.73
City	0.79	0.76	0.75	0.60	0.68	0.74	0.79	0.81	0.86	0.71	0.56	0.72
Hunter	0.52	0.43	0.49	0.54	0.50	0.61	0.50	0.53	0.45	0.42	0.39	0.49
Lehman	1.03	0.83	0.71	0.79	0.73	0.75	0.91	0.78	0.78	0.82	0.53	0.78
Queens	0.85	0.78	0.81	0.61	0.61	0.61	0.63	0.71	0.69	0.62	0.58	0.69
York	1.15	1.12	1.23	1.45	1.25	1.73	2.15	2.47	2.16	3.06	1.87	1.68
Comprehensive	1.18	1.12	1.12	1.19	1.32	1.26	1.37	1.29	1.37	1.43	1.32	1.27
John Jay	1.03	0.90	0.83	0.98	0.97	1.00	1.10	1.01	1.05	0.90	0.75	0.95
Medgar Evers	1.42	1.67	1.50	1.54	2.05	1.65	1.75	2.48	3.31	3.93	3.06	2.03
NYCCT	1.19	1.09	1.21	1.27	1.49	1.38	1.54	1.40	1.49	1.75	1.52	1.37
Staten Island	1.26	1.27	1.23	1.25	1.40	1.29	1.44	1.41	1.48	1.60	1.63	1.39
Community	1.39	1.49	1.45	1.50	1.74	1.53	1.55	1.57	1.92	2.12	1.90	1.62
BMCC	1.47	1.72	1.60	1.59	1.95	1.69	1.69	1.64	1.92	2.19	1.62	1.71
Bronx	1.40	1.54	1.57	1.47	1.74	1.51	1.56	1.50	1.81	2.15	1.82	1.65
Hostos	1.06	1.12	1.12	1.17	1.23	1.17	1.17	1.25	1.38	1.47	1.70	1.24
Kingsborough	1.36	1.48	1.38	1.52	1.68	1.47	1.51	1.60	1.79	1.92	2.14	1.60
LaGuardia	1.29	1.31	1.30	1.31	1.48	1.32	1.41	1.46	1.99	1.78	1.76	1.44
Queensborough	1.57	1.56	1.57	1.81	2.02	1.79	1.68	1.78	2.44	3.13	2.57	1.90

*Based on calculation of all years from 1990 to 2010, with the exception of 2009.

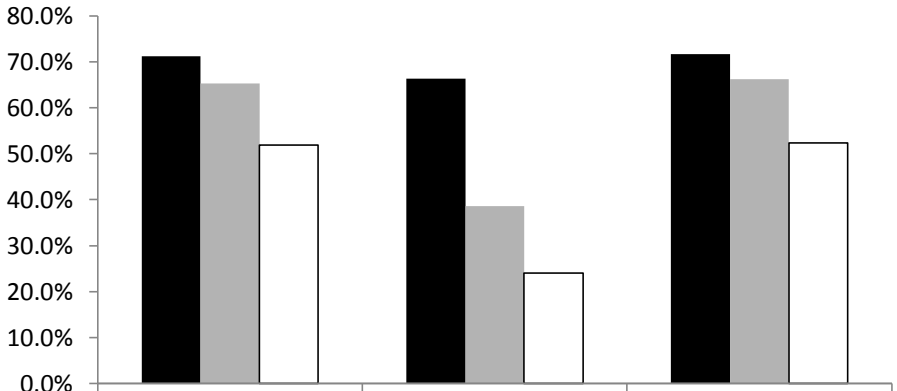
SOURCE: CUNY Admission System

Table 8.11. Percent of FTF Applicants Allocated to Sector of First Choice, by First Choice College, 1990 – 2010

First Choice College	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
Senior	71.3%	67.3%	68.2%	63.9%	56.1%	65.3%	62.5%	64.5%	62.2%	58.8%	51.8%
Baruch	67.7%	66.1%	66.7%	63.9%	54.5%	63.6%	62.9%	67.3%	65.0%	61.9%	58.6%
Brooklyn	72.6%	68.7%	69.1%	67.3%	57.6%	67.7%	59.7%	60.0%	62.0%	54.1%	44.7%
City	75.3%	70.6%	71.3%	65.2%	59.4%	69.8%	66.2%	67.2%	66.6%	60.4%	53.6%
Hunter	65.9%	60.4%	63.6%	60.9%	54.5%	63.2%	59.5%	63.3%	60.4%	59.6%	54.0%
Lehman	72.9%	64.2%	56.9%	53.9%	42.6%	51.1%	48.6%	46.5%	41.3%	36.6%	23.0%
Queens	75.9%	73.4%	77.3%	68.6%	64.0%	69.9%	70.6%	72.8%	68.3%	64.6%	57.9%
York	76.2%	71.7%	71.4%	63.9%	46.2%	71.2%	72.4%	71.6%	57.3%	58.3%	43.5%
Comprehensive	93.3%	87.8%	89.6%	92.2%	91.2%	92.6%	90.0%	87.7%	88.5%	82.6%	72.8%
John Jay	90.4%	81.4%	78.3%	88.0%	79.8%	80.9%	82.6%	84.9%	84.4%	69.9%	56.2%
Medgar Evers	97.7%	96.6%	92.1%	93.3%	96.5%	97.0%	95.6%	86.1%	88.6%	92.6%	87.1%
NYCCT	91.8%	85.2%	92.6%	92.6%	97.2%	97.3%	92.2%	85.2%	87.2%	87.5%	81.5%
Staten Island	97.9%	97.7%	98.1%	97.1%	97.5%	98.6%	96.3%	95.4%	96.7%	97.9%	89.7%
Community	97.9%	98.6%	98.6%	98.9%	99.2%	99.5%	96.3%	97.4%	97.7%	98.3%	98.7%
BMCC	98.2%	98.6%	98.8%	99.0%	99.2%	99.5%	95.3%	96.9%	96.3%	97.7%	97.2%
Bronx	98.9%	99.0%	99.1%	99.2%	99.4%	99.7%	97.5%	97.8%	98.6%	99.2%	99.7%
Hostos	99.2%	99.7%	99.5%	99.5%	99.6%	99.7%	98.4%	98.5%	99.3%	98.9%	99.2%
Kingsborough	95.3%	98.0%	98.3%	98.4%	98.9%	99.2%	94.6%	95.6%	98.0%	97.7%	98.7%
LaGuardia	98.7%	98.8%	98.2%	98.6%	99.2%	99.5%	97.0%	98.3%	98.0%	98.9%	99.3%
Queensborough	98.1%	98.2%	98.5%	98.9%	99.3%	99.6%	97.2%	97.7%	97.2%	98.0%	99.4%

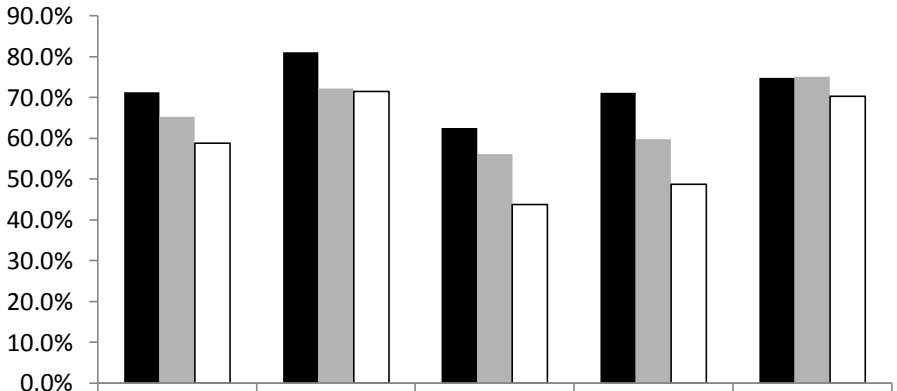
SOURCE: CUNY Admission System

Figure 8.10. Percent of First-time Freshmen Applicants to Senior Colleges Admitted to a Senior College, by Age, 1990, 2000, and 2010



	All	Age 25 and Older	Under Age 25
1990	71.3%	66.4%	71.7%
2000	65.3%	38.6%	66.2%
2010	51.8%	24.0%	52.3%

Figure 8.11. Percent of First-time Freshmen Applicants to Senior Colleges Admitted to a Senior College, by Race/Ethnicity, 1990, 2000, and 2008



	All	Asian	Black	Hispanic	White
1990	71.3%	81.1%	62.5%	71.2%	74.8%
2000	65.3%	72.2%	56.2%	59.8%	75.0%
2008	58.8%	71.4%	43.8%	48.7%	70.3%

Academic Credentials

Applicants are allocated to the college they rank the highest for which they meet the admissions requirements. These requirements are based strictly on academic qualifications. The University Application Processing Center (UAPC) calculates a College Admissions Average (CAA) for each applicant. CAA is calculated as the average of grades received in all high school courses designated as college preparatory, which include courses in English, Math, Social Sciences, Science, Foreign Language, and Fine Arts. Not all courses in core academic subjects are considered college preparatory. To determine whether a course is college preparatory, UAPC considers the course content, whether students in the course took an associated Regents exam, and the percentage passing the Regents exam.

Over time, the average CAA, total SAT score, and academic credits accumulated during high school have gradually increased among CUNY applicants. Between 1990 and 2010 the CAA increased from 76.5 to 78.9, and the number of total academic credits obtained in high school increased from 10.18 to 16.18. Between 1998 and 2010, the average total SAT score increased from 899 to 946. See Table 8.12.

The academic credentials of older students were on average lower than the credentials of younger students. In 2010 the average CAA of students under age 25 was 79.1 while it was 75.7 for older students, and the average total SAT score was 946 for younger students compared to 860 for older students. Older students also had fewer total credits compared to younger students. Between 1990 and 2010 the academic credentials of older applicants did not increase as substantially as they did for younger applicants. The average CAA of older applicants remained stable, the average total SAT score declined, and the total number of high school credits earned increased but by a smaller margin than for younger students. See Table 8.13.

On average, the academic credentials of Black and Hispanic FTF applicants were lower than the credentials of Asian and White applicants. These trends were apparent throughout the period from 1990 to 2008. The gap between the academic credentials of Black and Hispanic applicants and other applicants grew wider over time. For example, in 1996 White applicants had an average total SAT score that was 104 points higher than Black applicants and 102 points higher than Hispanic applicants. In 2008 White applicants had average SAT scores that were 175 points higher than Black applicants and 163 points higher than Hispanic applicants.

The gap in the average CAA also increased over time between White, Black, and Hispanic applicants. In 1990 White applicants had an average CAA that was 4.7 points higher than Black applicants, while in 2008 the gap had increased to 6.1 points. In contrast, the gap in the total credits accumulated during high school declined over time, although Black and Hispanic applicants still had fewer total credits in 2008 compared to White and Asian applicants. See Table 8.14.

Table 8.12. Academic Credentials of CUNY FTF Applicants, 1990 – 2010

	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
CAA	76.5	75.9	76.5	76.7	77.2	77.3	77.8	78.3	78.9	79.3	78.9
SAT Total	--	--	--	941	899	916	922	933	937	942	946
Total Credits	10.18	11.27	12.53	12.88	14.13	14.30	15.09	15.55	16.23	15.76	16.18

-- Data not available
SOURCE: CUNY Admission System

Table 8.13. Academic Credentials of CUNY FTF Applicants, by Age, 1990 – 2010

	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
Under 25											
CAA	76.6	76.2	76.9	77.0	77.4	77.6	78.1	78.5	79.1	79.4	79.1
SAT Total	--	--	--	941	899	916	923	934	937	942	946
Total Credits	10.68	11.95	13.61	13.72	14.77	15.04	15.73	16.07	16.55	16.00	16.49
25 & Over											
CAA	75.6	74.5	74.6	74.8	74.9	74.8	75.0	75.6	76.1	76.3	75.7
SAT Total	--	--	--	912	893	843	873	887	888	883	860
Total Credits	7.56	7.98	7.39	7.17	8.43	7.92	8.82	9.58	10.46	10.55	10.49

-- Data not available
SOURCE: CUNY Admission System

Table 8.14. Academic Credentials of CUNY FTF Applicants, by Race/Ethnicity, 1990 – 2008

	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008
White										
CAA	78.6	78.1	79.0	79.2	79.9	80.1	80.6	81.0	81.5	82.1
SAT Total	--	--	--	976	971	986	999	1005	1008	1027
Total Credits	12.24	13.18	15.09	15.26	16.09	16.42	16.93	17.12	17.50	16.55
Black										
CAA	73.9	73.2	73.8	74.1	74.4	74.4	74.8	74.8	75.1	76.0
SAT Total	--	--	--	873	852	852	855	849	846	852
Total Credits	8.73	9.63	10.81	11.28	12.64	12.63	13.33	13.75	14.55	14.34
Hispanic*										
CAA	76.3	75.2	75.6	75.7	75.9	76.1	76.2	76.5	77.1	77.3
SAT Total	--	--	--	874	844	843	849	857	857	863
Total Credits	9.74	10.43	11.18	11.69	12.99	13.21	14.23	14.91	15.89	15.35
Asian										
CAA	80.2	79.8	80.9	80.9	81.2	81.2	81.5	81.6	82.5	83.0
SAT Total	--	--	--	998	973	975	974	996	1012	1027
Total Credits	11.19	13.76	15.89	15.98	16.67	16.90	17.71	18.04	18.31	17.37

* Hispanic category excludes Puerto Rican before Fall 1991.
-- Data not available
SOURCE: CUNY Admission System

Academic credentials, by college of allocation. Examining the academic credentials of first-time freshmen by the college of allocation demonstrates that student placement within the CUNY system is dependent on applicants' academic credentials. As Black, Hispanic, and older applicants have, on average, lower CAA's, lower SAT scores, and fewer academic credits accumulated during high school, these student groups are less likely to be allocated to more selective colleges.

Substantial differences can be seen in the average academic credentials of students allocated to senior colleges versus community colleges. For example, in 2010 applicants allocated to Hostos had an average CAA of 74.1 and an average SAT score of 733, while applicants allocated to Baruch had an average CAA of 88.0 and an average SAT score of 1198.

Over the study period, CUNY senior colleges showed a substantial increase in the average credentials of allocated students. Between 1996 and 2010 there was more than a 100 point increase in the average SAT scores of students allocated to City and Lehman, more than a 150 point increase of students allocated to Hunter, and more than a 200 point increase of students allocated to Baruch. In contrast, the average SAT score of students allocated to comprehensive and community colleges showed little change.

Among applicants allocated to Baruch, City, Hunter, Lehman, and Queens, the average CAA increased by more than 5 points over the 20-year period. John Jay experienced an increase of 7.7 points in the average CAA of allocated students while there were slight increases at other comprehensive colleges. In contrast, the community college with the largest increase in the average CAA of allocated students was Queensborough with an increase of only 1.9 points.

Between 1990 and 2010 total credits accumulated during high school increased among allocated students at all colleges, ranging from an increase of 4.84 at Kingsborough to an

increase of 8.19 at City. While increases in total credits tended to be lower at community colleges and higher at senior colleges, there were some exceptions. For example, there was an increase of 7.11 credits at Medgar Evers and an increase of 6.43 credits at BMCC, larger increases than those seen at Brooklyn or Queens. See Tables 8.15, 8.16, and 8.17.

Table 8.15. Academic Credentials of CUNY FTF Applicants, by College of Allocation, Senior Colleges, 1990 – 2010

		1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
Baruch	Total Credits	12.78	14.68	17.11	17.96	19.70	19.92	20.18	19.95	19.65	19.45	20.24
	SAT Total	--	--	--	995	1054	1059	1082	1101	1136	1169	1198
	CAA	82.6	81.7	82.9	83.3	85.1	85.2	85.7	86.3	86.5	87.6	88.0
Brooklyn	Total Credits	13.34	15.85	18.16	18.25	18.96	18.36	19.00	18.89	18.85	17.72	19.21
	SAT Total	--	--	--	1064	1024	985	1021	1049	1057	1039	1100
	CAA	82.8	82.8	83.7	84.2	84.6	82.6	83.4	84.6	84.7	85.8	86.4
City	Total Credits	11.48	13.71	15.66	17.51	17.55	17.49	19.00	19.00	18.94	18.16	19.66
	SAT Total	--	--	--	1001	952	953	1007	1020	1026	1058	1119
	CAA	80.9	80.5	81.2	82.2	81.1	81.3	83.8	84.3	84.9	85.7	87.3
Hunter	Total Credits	12.60	14.49	16.86	18.08	18.76	18.66	19.33	19.37	19.40	18.87	19.93
	SAT Total	--	--	--	1006	1013	995	1045	1068	1116	1138	1192
	CAA	80.6	81.4	81.7	83.8	83.8	82.8	84.4	85.2	86.4	87.1	88.3
Lehman	Total Credits	9.93	11.15	13.34	14.75	14.88	15.61	16.05	16.76	17.19	16.59	18.03
	SAT Total	--	--	--	883	839	838	848	862	872	899	985
	CAA	77.0	77.5	78.7	78.9	80.3	78.1	78.0	79.2	80.6	81.5	84.6
Queens	Total Credits	13.22	14.92	16.84	18.41	18.98	19.46	19.42	18.95	19.02	18.39	19.40
	SAT Total	--	--	--	1064	1041	1056	1070	1060	1068	1081	1126
	CAA	81.8	81.9	82.4	85.0	85.5	84.8	86.1	85.4	86.1	86.6	87.3
York	Total Credits	10.02	10.61	12.31	13.97	16.22	15.44	15.54	16.19	16.71	16.49	17.51
	SAT Total	--	--	--	869	870	833	837	831	829	855	892
	CAA	76.6	76.1	76.9	75.9	78.0	77.3	76.7	76.3	78.4	80.1	81.2

-- Data not available

SOURCE: CUNY Admission System

Table 8.16. Academic Credentials of CUNY FTF Applicants, by College of Allocation, Comprehensive Colleges, 1990 – 2010

		1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
John Jay	Total Credits	9.92	11.39	13.44	13.06	14.60	15.61	16.08	16.34	16.48	16.29	17.24
	SAT Total	--	--	--	873	859	865	870	893	875	881	922
	CAA	74.5	74.4	75.8	75.0	76.6	77.3	77.4	77.8	77.7	79.9	82.1
Medgar Evers	Total Credits	7.70	8.28	8.51	8.64	10.92	10.00	10.80	13.67	14.18	14.26	14.81
	SAT Total	--	--	--	789	825	782	788	786	788	788	794
	CAA	72.3	71.7	71.9	71.8	72.5	71.9	72.8	73.0	73.1	73.9	74.8
NYCCT	Total Credits	9.07	9.95	11.07	11.04	12.30	12.12	13.32	14.65	14.56	14.95	15.74
	SAT Total	--	--	--	810	835	794	792	816	819	824	834
	CAA	73.4	72.8	73.2	73.2	73.4	73.3	73.7	74.2	74.5	75.6	76.6
Staten Island	Total Credits	10.73	11.50	13.33	13.42	14.77	14.45	15.33	15.36	15.76	14.91	16.32
	SAT Total	--	--	--	879	879	876	866	871	871	874	888
	CAA	74.1	73.5	74.9	74.7	75.8	75.8	76.1	76.4	77.0	77.1	78.4

-- Data not available

SOURCE: CUNY Admission System

Table 8.17. Academic Credentials of CUNY FTF Applicants, by College of Allocation, Community Colleges, 1990 – 2010

		1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
BMCC	Total Credits	7.62	9.00	9.51	9.69	11.28	11.46	12.13	12.04	13.35	13.19	14.05
	SAT Total	--	--	--	791	835	788	788	793	794	798	790
	CAA	72.7	72.3	72.4	72.6	73.4	73.7	73.5	73.5	73.5	73.9	74.1
Bronx	Total Credits	7.68	7.84	8.46	8.47	9.97	9.85	10.68	11.27	12.61	13.00	13.60
	SAT Total	--	--	--	756	815	752	738	751	746	752	752
	CAA	72.8	72.2	72.9	72.7	73.1	72.9	72.6	73.2	73.3	73.3	73.3
Hostos	Total Credits	8.64	8.23	6.55	7.96	10.19	7.68	9.12	10.45	12.51	12.45	13.49
	SAT Total	--	--	--	755	835	730	727	729	744	722	733
	CAA	74.7	74.0	74.0	74.1	74.8	73.8	73.8	73.8	74.8	73.8	74.1
Kingsborough	Total Credits	9.41	10.24	11.23	10.57	12.56	12.30	13.25	13.62	14.50	13.99	14.25
	SAT Total	--	--	--	800	838	793	794	803	803	821	809
	CAA	73.9	73.3	73.6	72.8	73.9	73.6	74.0	74.2	74.5	74.3	74.2
LaGuardia	Total Credits	8.42	9.34	9.99	10.07	11.52	10.81	11.71	12.79	14.43	13.75	13.88
	SAT Total	--	--	--	780	825	757	767	772	776	779	790
	CAA	73.5	73.3	73.7	73.6	74.1	74.2	73.8	74.5	74.4	74.2	74.4
Queensborough	Total Credits	9.37	10.11	10.65	10.92	11.98	12.24	12.64	13.40	14.61	14.45	15.04
	SAT Total	--	--	--	839	842	809	812	817	817	822	815
	CAA	72.9	72.5	73.0	73.1	73.9	74.0	73.9	74.0	74.7	74.5	74.7

-- Data not available

SOURCE: CUNY Admission System

Conclusion

The City University of New York is an institution committed to providing high quality and accessible higher education to New York City's many diverse constituents. Serving more than a quarter million undergraduates, CUNY provides great opportunities and great value. Historically, it is clear that CUNY is deeply rooted in the tradition of expanding access to public higher education. Yet the mechanisms for providing such opportunities have long been contested and have evolved over time. Every major development at CUNY – from founding the Free Academy in 1847, to creating a college for women in 1870, to the expansion of the municipal college system in the 1920s and 1930s, to the founding of the current CUNY system in 1961, to expanding access through open admissions in 1970, to ending remediation at the senior colleges in 1998 – has come with struggle.

Embedded within a particular political and economic context, struggle at CUNY continues today. The view that CUNY should ensure that disadvantaged student populations gain access to the top-tier senior colleges has been overshadowed by demands that CUNY attract academically talented students, achieve high graduation rates, and function with limited financial resources. Following the 1998 Board Resolution ending remediation at the senior colleges, there has been acceptance that broad access to the community colleges provides sufficient opportunities for educationally disadvantaged students. There is little acknowledgment of the relationship between increased admissions standards at the senior colleges and the demographic shifts that follow.

We must begin to discuss the relationship between admissions standards based solely on academic credentials and resultant stratification by age and race/ethnicity. We must also question why the most disadvantaged students are not applying to CUNY as first-time freshmen to the

extent they did 20 years ago, and why many such students enroll in for-profit colleges instead. Once we can begin an honest conversation about who is gaining access to the most selective institutions, we can then work to address inequities. The focus should not solely be the academic credentials of incoming freshmen, but instead on CUNY's success with the most disadvantaged students. In my view, it is good for CUNY to have a range of curricular options, including options for students who have achieved at a high level. But we must redouble our efforts to educate at the associate level and ensure that associate students have opportunities to transfer to a senior college.

The research presented here is just a starting point. There are many other questions that need to be explored. Interviews with faculty and administrators could more fully explore perceptions of CUNY's mission and how the university could best serve the needs of New York City. By using unique student identifiers, individual students could be tracked throughout high school and higher education, allowing us to better understand why particular student groups are underrepresented at CUNY. Additionally, a better understanding is needed of the impact of financial aid. It is possible that the New York State Tuition Assistance Program, which is primarily available for full-time students and has extremely low income thresholds for independent students, may play a role in limiting access.

In order to address the underrepresentation of particular student groups at CUNY, a number of innovative policies and practices should be considered. For instance, recruitment could be more carefully targeted toward underrepresented student groups. To recruit working adults, colleges could create stronger linkages with employers and departments of Adult and Continuing Education. The CUNY senior colleges could reinstate a policy allowing "conditional admits" (students who do not meet CUNY skills proficiency requirements), or expand the SEEK

program. The admissions process could be altered to include a more holistic analysis of applicants' academic strengths, rather than relying solely on criteria such as SAT scores. Since disadvantaged students are more likely to drop out, CUNY must continue to work toward improving student retention and graduation rates. The transfer function must also be addressed, so that more students who must begin college work at a community college have the opportunity to transfer to a senior college. CUNY must continue its work with the New York City Department of Education to better prepare disadvantaged students. From a state policy perspective, the appropriateness of the for-profit sector should be considered, and steps should be taken to educate students about the costs and benefits of enrolling in for-profit institutions.

Appendix. Map of CUNY Colleges

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