

**Gender Differences in High School Graduation Rates and
College Enrollment Rates of Graduates From Boston Public
High Schools in Recent Years: Findings of the Follow-up
Surveys for the Classes of 1999, 2000 and 2001 and Agenda for
Future Research**

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Introduction

Since the mid-1980s, the Boston Private Industry Council (PIC) in cooperation with the city of Boston's public schools and the Center for Labor Market Studies of Northeastern University has actively conducted an annual follow-up survey of each year's high school graduating class. Both the coverage and comprehensiveness of the annual follow-up survey is a unique one in the nation. It tracks each graduate's post-secondary schooling/trainings and labor market activities approximately 9 to 10 months after their graduation from high school. Very few high schools across the nation collect any systematic data on the college and employment status of their graduates other than brief exit surveys asking graduates to describe their college and job plans, with no followup to determine whether these plans were realized.¹ The PIC follow-up survey collects information on each Boston public high school graduate's college enrollment and employment status, the types of colleges and post-secondary training institutions attended, their college majors, their financial aid status, and key characteristics of their jobs, such as hours of work, hourly wages, occupations and industries of their employers, their job related training activities, and their opinions on how well their high schools prepared them for college and the labor market.²

Three of the main indicators of the success of Boston public high school graduates in making the transition from high school to college and the labor market are the following: the college enrollment rate, the employment rate, and the inactivity rate, i.e., the fraction of graduates neither attending college/or a post-secondary training nor working. Findings of the follow-up surveys were generally quite favorable for graduates from the Class of 2001 as well as for the preceding three years' graduating classes. Findings for each of these three indicators also were more favorable for Boston public

¹ The Massachusetts' Department of Education does collect data on the college and job market plans of graduates from each public school district and reports these findings in an annual research report.

² For recently released findings on the opinions of graduates from the Class of 2001 see: Ishwar Khatiwada, Andrew Sum, and Jacqui Motroni, Boston Public School Graduates' Perceptions of Their High Schools' Effectiveness in Preparing Them for College and The Labor Market: Findings from the Follow-up Survey of Class of 2001 Graduates, Center for Labor Market Studies, Northeastern University, Boston, November 2002.

high school graduates than for most their national counterparts especially in each major race-ethnic groups. Nearly 70 percent of the Class of 2001 graduates were attending a post-secondary education or training program at the time of the winter 2002 follow-up survey, the highest college enrollment rate ever recorded in the history of Boston public high schools. The college enrollment rate for Boston public high school graduates was 3.4 percentage points higher than that of their national counterparts (65.1 percent vs. 61.7 percent).³ Nearly 57 percent of Boston public high school graduates, including those youth attending college, were working at the time of the winter 2002 follow-up survey. However, employment rates of Class of 2001 graduates in both the city of Boston and nation as a whole had declined in comparison to those for the Class of 2000, reflecting the on-going weakness in U.S. labor markets, especially for young adults. The overall employment rate for Boston public high school graduates was 7.7 percentage points higher than that for their national counterparts (56.9 percent vs. 49.2 percent).⁴ At the time of the Winter 2002 follow-up survey, only 9.2 percent of Boston public high school graduates from the Class of 2001 were occupying an “at-risk” category, i.e., neither working nor enrolled in a school or a training program. This “at-risk” rate was 1.6 percentage points above the idleness rate of the preceding year’s graduating class, which was the lowest in the past decade. The labor market deterioration in the past year had pushed up the idleness rate by nearly two percentage points.

Even though most of these findings on the college attendance and employment rates of Boston public high school graduates were quite positive, there were other aspects of the follow-up surveys’ findings that should be viewed as disturbing by the city’s educational policy makers and administrators. Continuing large Gender gaps in key educational outcomes need to be addressed. The number of women who graduated from the Boston public schools was higher than the number of men (113 women per 100 men)

³ The college attendance rate of Boston public school graduates was adjusted to exclude those graduates from the Class of 2001 who were attending one-year business college or post-secondary vocational/technical programs not leading to a degree. These definitional adjustments were needed to conform to the college attendance definitions of the U.S. Census Bureau in conducting the October CPS surveys on the school enrollment status of recent high school graduates

⁴ Military service personnel were excluded from the count of the employed in both the city of Boston and the U.S in making these comparisons.

despite the fact that there were more males than female in the freshman class three years earlier (89 women per 100 men). Similar to the findings of the previous three years of follow-up surveys, there was a substantially greater number of female graduates than male graduates from the Class of 2001 who were attending college or post-secondary training institutions at the time of the follow-up survey. An analysis of the gender characteristics of Class of 2001 Boston public high school graduates attending college or post-secondary training institutions showed that there were an estimated 1,296 female graduates but only 945 male graduates attending college. As will be revealed in a following sections, gaps in college attendance rates by gender prevailed for each major race-ethnic group, however, the relative size of these gaps were considerably higher for Blacks, Hispanics, and Whites than they were for Asian youth.

In this research report, we will provide a description and analysis of gender differences in high school graduation rates and in college enrollment rates among Class of 2001 Boston public high school graduates. To begin to understand the sources of these differences in college enrollments by gender, we examine freshmen enrollment levels by gender and type of school in 1997-98 when most of the graduating seniors from the Class of 2001 would have begun their high school careers. We then will analyze gender differences in high school graduation rates for these 1997-98 freshman and in college attendance rates for those men and women who graduated from the city's public high schools in 2001. Findings on these college enrollment rates are presented for all men and women and for both men and women in each of the following four race-ethnic groups: Asians, Black, not Hispanic, Hispanic, and White, not Hispanic. Findings on gender differences in college attendance rates for Boston's public high schools will be compared to those of the nation for the Class of 2001. Trends in college attendance rates among male and female high school graduates throughout the nation over the past decade also will be highlighted. The final section of this paper will provide a summary of the main findings, identify some of their economic and social consequences, and lay out a research agenda to improve our future knowledge of the factors that produce the current large but shrinking gender gaps in high school graduation and college enrollment rates.

College Enrollment Rates of Class of 2001 Graduates From the Boston Public High Schools

As mentioned earlier, the annual PIC follow-up survey collects information on the college and post-secondary training activities of each respondent at the time of the interviews, the late winter and early spring of 2002. The findings are used to generate estimates of the total number of Class of 2001 graduates who were attending either a college (two-year, four year) or a post-secondary training institution.⁵ Nearly 70 percent of Class of 2001 graduates were estimated to be enrolled in college or post-secondary training institution at the time of the winter 2002 follow-up survey. The estimated total number of graduates in a college or a post-secondary training program was 2,241 of whom 1,296 were women and 945 were men. (Table 1). Thus, there were 137 female graduates enrolled in college or training programs for every 100 male graduates from the Class of 2001, a ratio that was modestly lower than that for the preceding year's class which stood at 144. The ratios of female to male college enrollees for the Classes of 1998 and 1999 were 159 and 147, respectively.

Thus, there has been progress over the past two years in reducing the very large gender gaps in college enrollment levels. This gender difference in college enrollment levels was not due to an equivalently large number of female high school graduates. Women were both more likely than men to graduate from high school and to enroll in college after graduation.

⁵ The survey findings for those graduates with completed follow-up interviews were weighted by race-ethnic group and high school to generate estimates of the population of graduates attending college. The follow-up interview completion rates were nearly identical for men and women, with completion rates ranging from 81 to 83 percent.

Table 1: Estimated Number of Class of 2001 Boston Public School Graduates Attending College at the Time of the Follow-up Survey, Total and by Gender

Gender Group	Number Attending a College or Post-Secondary Training Program
All	2,241
Men	945
Women	1,296
Number of Women Per 100 Men Attending College	137 per 100
Number of Women Per 100 Men Starting the Freshman Year of High School in 1997-1998	89 per 100

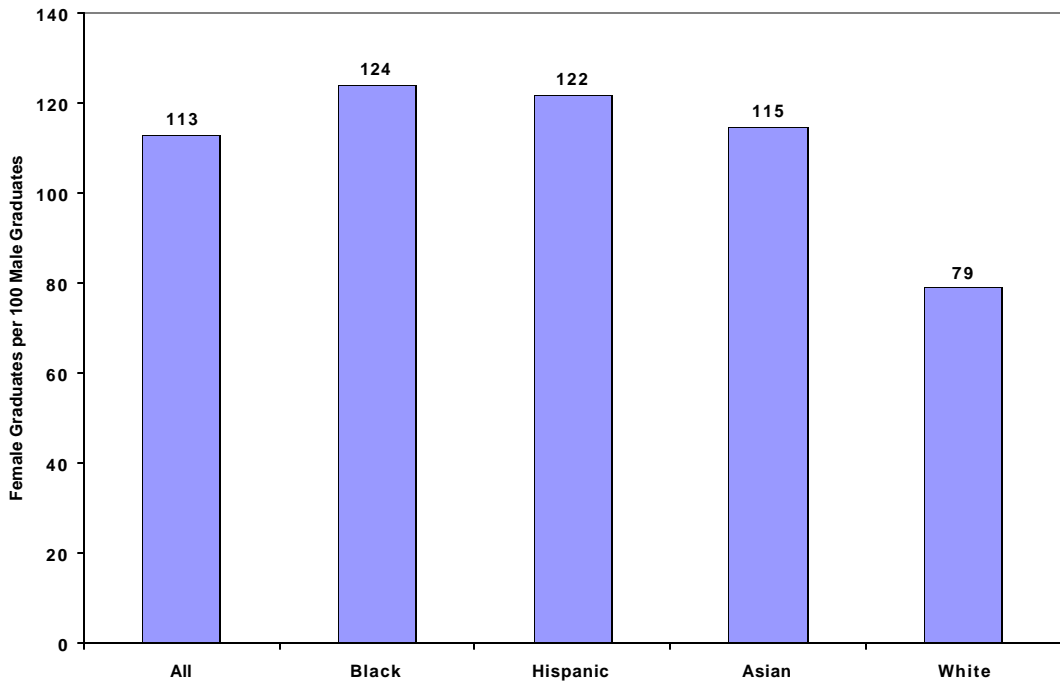
The Gender Composition of High School Freshmen in 1997-1998 and Their Estimated Graduation Rates

The gender gaps in the number of high school graduates from Boston public high schools over the five year period from 1997 to 2001 are quite striking. (Table 2). For each of these five graduating classes, the number of female high school graduates exceeded the number of male graduates by 13 to 26 percent, with the largest relative difference prevailing for the Class of 1999. Over the past two years, however, the size of the gender gaps has narrowed considerably falling to 113 women per 100 men for the Class of 2001. Relatively large female-male differences in the number of high school graduates occurred among three of the four major race-ethnic groups, with the largest relative differences prevailing among Blacks and Hispanics. Among Whites, there were more male than female graduates. (Chart 1). For example, for the Class of 2001, there were 124 Black female graduates for every 100 Black male graduates and 122 female Hispanic graduates for every 100 Hispanic male graduates. The ratio of female graduates to male graduates among Asians was 115 per 100. The number of female and male graduates among Asian used to be equal in earlier years. At the other extreme, the ratio of female graduates to men among Whites was only 79 for the Class of 2001, reflecting a low number of White female freshmen.

Table 2: Number of Male and Female Graduates from Boston Public High Schools, Classes of 1997 to 2001

Graduating Class	Female	Male	Females per 100 Males
1997	1,453	1,217	119
1998	1,685	1,390	121
1999	1,670	1,321	126
2000	1,591	1,343	118
2001	1,708	1,513	113

Chart 1: Number of Female Graduates per 100 Male Graduates from Boston Public High Schools, Class of 2001, Total and by Major Race-Ethnic Group



Over the past five years, there have been large gender differences in the number of graduates from both the exam and district high schools. The higher ratios of female to male graduates in the three exam schools is attributable in large part to higher numbers of incoming female freshman three years earlier. In both the exam schools and the district schools, the numbers of female graduates from the classes of 2000 and 2001 were higher than the number of male graduates, with large differences prevailing for the three exam

schools. However, there has been a substantive improvement in the gender gaps among exam school graduates over the past two years. (Table 3). For the Class of 2001, there were 117 women graduating from the city’s three exam schools for every 100 men as compared to 158 women per 100 men for the Class of 1999 and 126 women per 100 men for the Class of 2000. Among all other high schools, including the district high schools, there were 112 female graduates for every 100 male graduates from the Class of 2001. On the positive side, these gender gaps in the numbers of new high school graduates have been diminishing over the past few years in both exam and district schools.

Table 3: Number of Male and Female Graduates from Boston Public High Schools, by Type of High School, Classes of 1998, 1999, 2000, and 2001

Graduating Class	Exam Schools			Non-Exam Schools		
	Female	Male	Females per 100 Males	Female	Male	Females per 100 Males
1998	440	298	148	1,245	1,012	123
1999	453	287	158	1,217	1,034	118
2000	400	317	126	1,194	1,033	116
2001	396	338	117	1,312	1,175	112

To better understand the sources of the gender differences in the numbers of graduates from the city’s public high schools, we need to identify how many students entered high school as freshman and their gender characteristics. Most of the high school graduates from the Class of 2001 would have begun their freshman year of high school during the 1997-98 year.⁶ During that year, there were 5,325 high school freshmen in Boston public schools, of whom 2,815 were men and 2,510 were women. (Table 4). Overall, there were only 89 women per every 100 men in the freshman class. The female/male ratio, however, varied quite considerably between the city’s three exam schools and the district/magnet schools. In the three exam schools (Boston Latin, Latin Academy, and O’Bryant Technical High School), there were 111 women in the freshman class for every 100 men while only 84 women attended the city’s district schools for

⁶ Some of the graduates from the Class of 2001 would have started their freshmen year earlier but been held back a year due to academic performance.

every 100 male freshmen. Within the city’s three exam schools, the number of women per 100 freshmen ranged from 97 in Boston Latin to 127 for O’Bryant Technical High School while in the district schools, the number of women per 100 male freshmen ranged from 68 in East Boston High School and West Roxbury High School to 103 for Charlestown High School and Fenway High School. Why fewer males than females enter the city’s three exam schools as freshman is a research question that needs to be addressed. But again, it should be noted that the gender gap in freshmen enrollments in the exam schools has been diminishing.

Table 4: Number of High School Freshmen in the 1997-1998 School Year, Total and by Gender for All High Schools, Exam Schools, and All Other Schools

Group	All High Schools	Exam Schools	All Other High Schools
All	5,325	1,086	4,239
Women	2,510	572	1,938
Men	2,815	514	2,301
Women per 100 Men	89	111	84

High School Graduation Rates Among Men and Women from the City of Boston’s Public High Schools

Our preceding findings have revealed that the higher aggregate number of female college enrollees in recent years was not attributable to a larger number of women among the incoming public high school student population of the city. Of the 5,325 freshmen in the 1997-98 school year, only 3,221 had graduated by 2001, representing a “graduation rate” of just above 60 percent. (Table 5). It should be noted that some of the non-graduates transferred to other public high schools outside of the city and to private schools, some were still enrolled in high school in 2002, and others dropped out without receiving a diploma. Based on official school dropout data for the Boston public schools in recent years, it seems likely that 30 of every 39 “non-graduates” were in fact official high school dropouts with males much more likely than women to dropout. Over the past

few years, it has been observed that women were more likely than men to graduate from Boston public high schools. For the Class of 2001, the number of female graduates as a percent of 1997-98 female freshmen was 68 percent versus only 54 percent for men. An important public policy question is what happened to the remaining 2,104 freshman from the incoming class of 1997-98? Unfortunately, we don't have micro data on either the ultimate graduation status or the current school enrollment status of these students who did not graduate with the Class of 2001.

Table 5: Class of 2001 Graduates from Boston Public High Schools as a Percent of Incoming Freshmen During the 1997-1998 School Year, Total and by Gender

Gender Group	1997-1998 Freshmen	2001 Graduates ⁷	Graduates as a % of Freshmen
All	5,325	3,221	60.5
Women	2,510	1,708	68.0
Men	2,815	1,113	53.7

The overall “high school graduation rate” in 2001 for 1997-98 freshman students slightly over 60 percent. Women who entered high school in the 1997-98 school year graduated at a much higher rate than men. The high school graduation rate of women from the city’s public high schools was estimated to be 68 percent versus 54 percent for men, a near 14 percentage point difference. In both the exam and district high schools, women were more likely to graduate than men. In the three exam schools, 69.2 percent of female freshmen graduated with the Class of 2001 versus only 65.8 percent of the male freshmen, a 3.4 percentage point difference in favor of women. (Table 6).

⁷ The total number of Class of 2001 graduates, according to the data provided to the Boston Private Industry Council by the Boston public schools, was 3,221. The higher number of graduates for the Class of 2001 is partly due to the inclusion of two new schools (Boston Arts Academy and Boston Adult Academy).

Table 6: Class of 2001 Graduates from the City's Three Exam Schools as a Percent of Incoming Freshmen During the 1997-1998 School Year, Total and by Gender

Gender Group	1996-1997 Freshmen	2001 Graduates	Graduates as a % of Freshmen
All	1,086	734	67.6
Women	572	396	69.2
Men	514	338	65.8

In two of the three exam high schools, the graduation rates of women exceeded those of men, with the size of the gaps ranging from nearly 2 percentage points for O’Bryant Technical High School to nearly 13 percentage points for Boston Latin High School. (Table 7). In contrast to our earlier years’ findings, the graduation rate of men from Boston Latin Academy surpassed that of women by nearly 6 percentage points.

Table 7: Estimated Percent of 1997-1998 Freshmen Who Graduated in 2001 In Each of the Three Exam Schools by Gender

High School	Men	Women	Women-Men
Boston Latin	67.3	80.1	12.8
Boston Latin Academy	65.5	59.8	-5.7
O’Bryant Technical	63.6	65.4	1.8

Women also were much more likely than men to graduate from the city’s district high schools. For the district and magnet schools combined, the number of Class of 2001 graduates as a percent of 1997-98 freshmen was nearly 59 percent. The graduation rate of women exceeded that of men by 17 percentage points (68 percent vs. 51 percent). (Table 8). Only a slight majority of the freshmen men from the city’s district and magnet schools were able to graduate from high school three years later. This result is the most troublesome.

Table 8: Class of 2001 Graduates from the City's District/Magnet Schools as a Percent of Entering Freshmen During the 1997-98 School Year, Total and by Gender

Gender Group	1997-1998 Freshmen	2001 Graduates	Graduates as a % of Freshmen
All	4,239	2,487	58.7
Women	1,938	1,312	67.7
Men	2,301	1,175	51.1

The findings of higher dropout rates among males in the city of Boston's public schools were not unique to the city. Similar findings have been revealed by the Massachusetts Department of Education's statewide dropout studies including the recent 200-2001 report.⁸ The annual high school dropout rate for males in Massachusetts during the 2000-2001 school year was 4.1 percent versus only 2.8 percent among women, a 46% difference. (Table 9). The dropout rate for male high school students in the city of Boston was 27 percent higher than that of women, with 9.3 percent of male high school students dropping out during that year versus 7.6 percent of the women. A continuation of this annual dropout rate for men for four year would yield a near 33% cumulative dropout rate for men from the city's public high schools. We also examined annual high school dropout rates for men and women in 10 other central cities and low income cities in the state during the 2000-2001 school year. Dropout rates for men were higher than those of women in all of these cities. The dropout rates of men were 9 to 92 percent higher than those of women in all eleven of these cities.

⁸ See: Massachusetts Department of Education, Dropout Rates in Massachusetts Public Schools: 2000-01, Malden, August 2002.

Table 9: Estimates of Annual High School Dropout Rates in Massachusetts, the City of Boston, and Other Central Cities in the State, by Gender, 2000-2001 School Year

Area	Men	Women	Men as % of Women
State	4.1	2.8	146
Boston	9.3	7.6	127
Brockton	7.5	3.9	192
Chelsea	11.4	9.6	119
Gardner	3.6	2.8	129
Fall River	7.9	6.2	127
Lawrence	14.9	10.0	149
Lowell	12.0	7.4	162
New Bedford	8.7	5.4	161
Pittsfield	11.1	6.6	168
Springfield	8.4	7.7	109
Worcester	7.0	5.6	125

College Attendance Rates of Boston Public High School Graduates From the Class of 2001

Findings in the previous section revealed higher high school graduation rates for women than for men from Boston’s public high schools. This finding of a higher graduation rate for women held true for the exam schools and district schools separately and for each race-ethnic group. Once students have graduated from high school are there any substantive gender differences in their college attendance rates? Findings for the previous five years revealed consistently higher college enrollment rates for women. To answer this question for the Class of 2001, we analyzed the findings of the winter 2002 PIC follow-up survey on the college enrollment status of male and female graduates from the Class of 2001. Findings in Table 10 clearly indicate that there were substantive gender differences in college attendance rates between male and female graduates from the Class of 2001. Overall, three of every four female graduates from the Class of 2001 were attending a two or four years college or a post-secondary training institution at the time of the Winter 2002 follow-up survey versus only 63 percent of the men, nearly a 17 percentage point difference in favor of women (Table 10). Women in each race-ethnic group were attending college at a higher rate than their male counterparts at the time of

the winter follow-up survey, with the size of these differences ranging from a low of 5 and 11 percentage points for Asian graduates to highs of 13 and 18 percentage points for White and Hispanic graduates, respectively. College enrollment rates of women were higher than those of men from both the exam schools and district schools. The college attendance rate of women was 13 percentage points higher than that of men in the district schools, but only 7 percentage points higher in the exam schools.

Table 10: Estimated College Attendance Rates of Class of 2001 Boston Public High School Graduates by Gender and Race/Ethnic Group
(Numbers in Percent)

	Women	Men	Women-Men
All	75.3	63.5	11.8
Asian	90.8	85.6	5.1
Black, not Hispanic	72.4	61.1	11.3
Hispanic	70.9	53.0	18.0
White, not Hispanic	78.3	65.1	13.2
Exam Schools	92.4	85.5	6.9
District Schools	70.2	57.1	13.1

The estimated total number of female graduates from the Class of 2001 who were attending college or post-secondary training institutions at the time of the follow-up survey was 1,296 versus only 946 men. Thus, there were 137 women attending college or post-secondary training institutions for every 100 male graduates from the Class of 2001. (Table 11). The female/male ratios were even higher for graduates from the Class of 1998, 1999, and 2000. Thus, there has been steady progress over the past three years in reducing the size of this important gender gap. The female/male ratio for Class of 2001 graduates was considerably lower than that for the Class of 1998 (160). In three race-ethnic group, the number of female graduates from the Class of 2001 who were enrolled in college at the time of the winter 2002 follow-up survey substantially exceeded the number of men, with the relative size of these differences ranging from 120 women per 100 men among Asian graduates to highs of 148 and 177 women per 100 men among Black and Hispanic graduates, respectively. Among Whites, there were only 98 female

college enrollees per 100 men, reversing outcomes for the prior three years. While the size of the gender differences in college enrollments was eliminated for White graduates for the Class of 2001, it remained sizeable for the three other race-ethnic groups especially among Black and Hispanic graduates. (See Table 12).

Table 11: Gender Distribution of College Enrollees from the High School Graduating Class of 2001 (Weighted Cases)

	Male	Female	Females per 100 Males
All	946	1,296	137
Asian	160	192	120
Black, not Hispanic	431	636	148
Hispanic	148	262	177
White, not Hispanic	205	202	98

Table 12: Gender Distribution of College Enrollees from the High School Graduating Class of 2000 (Weighted Cases)

	Male	Female	Females per 100 Males
All	825	1,189	144
Asian	149	162	109
Black, not Hispanic	389	581	149
Hispanic	109	239	219
White, not Hispanic	178	204	115

Table 13: Gender Distribution of College Enrollees from the High School Graduating Class of 1999 (Weighted Cases)

	Male	Female	Females per 100 Males
All	810	1,192	147
Asian	122	154	126
Black, not Hispanic	351	549	156
Hispanic	133	218	164
White, not Hispanic	204	265	130

Table 14: Gender Distribution of College Enrollees from the High School Graduating Class of 1998 (Weighted Cases)

	Male	Female	Females per 100 Males
All	721	1,150	160
Asian	128	156	122
Black, not Hispanic	346	594	172
Hispanic	119	223	187
White, not Hispanic	127	177	139

Comparisons of the College Attendance Behavior of Male and Female Graduates From the Boston Public High Schools With Those for All Graduates from the U.S.

Each year in October, the U.S. Census Bureau includes a set of supplementary questions to the monthly CPS household survey to identify recent high school graduates and their college enrollment status during that month. We have used the findings of the October 2001 CPS survey to make comparisons of college enrollment rates for Boston’s public high school graduates with those for their national counterparts from the Class of 2001, both overall and by gender and race-ethnic group.⁹ Overall, the college enrollment rate for Boston public school graduates was 65% versus slightly under 62% for U.S. high school graduates. Boston public high school graduates were 3.4 percentage points more likely to enroll in college than their national counterparts. All of the city’s college enrollment advantage was due to women. Male graduates from Boston were nearly 2 percentage points less likely than their national male counterparts to be enrolled in college whereas female high school graduates from Boston were nearly 12 percentage points more likely to enroll in college than their U.S. counterparts. (Table 15). Class of 2001 graduates from the city’s public high schools in each major race-ethnic group were

⁹ For data on the college enrollment activities of recent high school graduates in the U.S., see: U.S. Bureau of Labor Statistics, “College Enrollment and Work Activities of Year 2001 High School Graduates”, Washington D.C., May 2002.

more likely to be attending college than each of their national counterparts with the size of these advantages ranging from 4 to 8 percentage points.

Table 15: Comparisons of College Attendance Rates of Boston Class of 2001 Public School Graduate¹⁰ with Those of Their Counterparts in the U.S., Total and by Gender

Demographic Group	Boston	U.S.	Boston Less U.S.
All	65.1	61.7	+3.4
Men	58.1	59.8	-1.7
Women	75.5	63.6	+11.9
Black	62.7	54.8	+7.9
Hispanic	56.9	51.5	+5.4
White	67.5	63.1	+4.4

Trends in The College Attendance Behavior of Young Male and Female High School Graduates and Young Adults in the U.S.

The college attendance rate of new high school graduates in the U.S. has increased modestly over the past decade, rising from 59.8 percent in 1990 to 61.7 percent in 2001; however, the college attendance rate of new high school graduates has been characterized by several important shifts over the past 10 years. (Table 16). For example, the college attendance rate rose from slightly under 60 percent in 1990 to 66 and 67 percent in 1997 and 1998, a gain of 6 to 7 full percentage points. After 1998, the college attendance rate has declined fairly steadily, falling slightly below 62 percent in the year 2001. The nation's college attendance rate in 2001 was back to where it stood in 1992. The finding of gender gaps in college attendance rates is clearly not unique to the public high schools of Boston or Massachusetts. Such gender gaps in college attendance also prevailed for the nation as a whole though they tend to be smaller nationally than in the city.

¹⁰ Boston's college attendance rates were adjusted to exclude those graduates from the Class of 2001 who were attending one year business colleges or post-secondary vocational/technical programs. They are not counted as college students in the October CPS surveys.

Table 16: October College Attendance Rates of Each Year's New High School Graduates, Total and by Gender, U.S.: Classes of 1990 to 2001 (Numbers in Percent)

Year	All	Men	Women	Women-Men
1990	59.8	57.8	62.0	4.2
1991	62.3	57.5	67.1	9.6
1992	61.6	59.6	63.8	4.2
1993	62.6	59.7	65.4	5.7
1994	61.9	60.6	63.2	2.6
1995	61.9	62.6	61.4	-1.2
1996	61.9	60.0	69.7	9.7
1997	67.0	63.5	70.3	6.8
1998	65.6	62.4	69.1	6.7
1999	62.8	61.4	64.4	3.0
2000	63.3	59.8	66.2	6.4
2001	61.7	59.8	63.6	3.8

Data Source: U.S. Bureau of Labor Statistics, "College Attendance of New High School Graduates," Selected Publications, 1991 to 2000.

Summary of Findings and Future Research Issues

Our research findings on the continued existence of substantial gender differences in high school graduation rates and college attendance rates among recent graduates from Boston public schools should be of concern to educational and political leaders, community leaders, workforce development agencies, and the public at large. The high school graduation rates of men were substantially lower than those of women especially in the district and magnet schools. Considerably more women than men graduated from Boston public schools in 2001 despite the fact that there were more males in the freshman class three years earlier. The findings on the numbers of male and female graduates from the Class of 2001 do however shows a diminishing gender gap over the past three years, a sign of progress. College enrollment rates among female high school graduates from the Class of 2001 were markedly higher than those of men, both overall and in each race ethnic group.

The higher dropout rates and lower college enrollment rates among males, especially those from the district high schools, will adversely affect their lifetime labor market and economic success. National labor market research has consistently revealed the existence of substantially higher lifetime earnings for high school graduates than those without a high school degree and for college graduates than for high school graduates. Based on 2000 national cross-sectional annual earnings data, males lacking a high school diploma or a GED certificate will obtain lifetime earnings through age 64 of only \$855,000, a total that was \$452,000 less than that of a typical male high school graduate and \$890,000 less than a male obtaining an associate's degree.¹¹ Males with a bachelor's degree had expected lifetime earnings of \$2.546 million in 2000, exceeding that of high school graduates by \$1.245 million, or nearly 100 percent. The higher dropout rates of young men from the Boston public schools and their lower college enrollment rates will considerably lower their expected lifetime incomes, reduce their ability to form independent households, to marry, to support their children, and to contribute to the economic well-being and the productivity of their communities and the nation at large. The poorer educational outcomes of young men, thus, deserve the attention of all of the city's educational, political, community and religious leaders.

There are a number of important unanswered research questions regarding the existing gender differences in high school graduation rates and college attendance rates for Boston's public high schools. Improving our knowledge base on why these key educational outcomes for men in Boston's public high schools are considerably poorer than those of women will require further, substantial research in the following areas:

First, why do women continue to gain entry into the city's three exam schools at higher rates than men? It should be recognized that some important progress seems to have been made in this area over the past few years. Do fewer men than women apply for the tests needed to gain entrance to the city's exam schools? If so, why are there gender gaps in these application rates? Do men perform significantly less well than women on

¹¹ For similar findings for earlier years, see: Andrew Sum, Neeta Fogg, and Garth Magnum, Confronting the Youth Demographic Challenge: The Labor Market Prospects of Out-of-School Young Adults, Sar Levitan Center for Social Policy Studies, Johns Hopkins University, Baltimore, 2000.

the entrance exams? Or, do men simply not enroll at the same rates as women when they are admitted into the exam schools?

Second, why do males in the city's three exam schools exit from these schools at higher rates than women prior to graduation? What role does poor academic performance play in influencing the higher exit rates of men? What happens to these male exam school leavers? Do they transfer to other high school in the city, including private schools, do they transfer to high schools outside of the city, or do they eventually drop out of high school altogether? The official annual dropout rates for the city's three exam schools for recent years are very low, i.e., under one percent. If these findings are true, this must imply that men from the exam schools are transferring out at much higher rates than women. What factors underlie these higher transfer rates among men and what policies can be adopted to improve their retention in the exam schools?

Third, why do males in the district schools and the alternative high schools drop out of these high schools at much higher rates than women? Only 50 percent of the freshmen in these schools appear to graduate on time. Where do these male school leavers go after they exit the Boston public schools? How many of them transfer to other high schools within the city or to other high schools in the state? How many of them ever graduate from high school? How many of them will go on to obtain a GED certificate? How many simply end up jobless and/or involved with the criminal justice system? How many end up as absent fathers and contributing to the high rate of childhood poverty? There is a clear need for more longitudinal tracking of all high school dropouts, both men and women. This is true for both the city of Boston and many other state's large central cities.

Fourth, why do male high school graduates outside of the three exam schools attend college at considerably lower rates than their female counterparts? Do these men have significantly weaker academic skills and course grades? Were they less likely than women to take a college-oriented curriculum? Were they less likely to apply to college and to gain admission when they did apply? Can better tutoring, counseling and

mentoring programs improve college enrollment rates of young men from the city's public high schools?

Fifth, do existing school-to-career programs or Bridge Programs offering assistance in enrolling in college significantly enhance graduation rates and college attendance rates among male and female graduates? Our analysis of findings from the follow-up survey for Class for 2001 graduates revealed that participant in school-to-career programs including the Academy of Finance, Pro Tech and Tech Boston were significantly more likely to be enrolled in college, but we need more multivariate analyses incorporating school transcript data.

Sixth, how well have recent male and female graduates from the city's public schools fared in college? What are the college retention rates and academic performance of recent male and female graduates who went to enroll in college? Longitudinal tracking of performance in each of these areas is critical to evaluating the long-term success of Boston's academic and school-to-career programs in improving post-secondary educational outcomes for the city's public school graduates. The time for substantive and substantial research in these areas is now. Our existing knowledge base is simply too thin.

These are the research questions of paramount importance if we are to obtain a more comprehensive understanding of the lower high school graduation rates and college attendance rates of recent male high school students in the Boston public schools. Once the magnitude and sources of these problems are better understood by policy makers and program administrators, the city can begin to design and implement new education, tutoring, counseling, mentoring, and college transition programs to bolster the high school graduation and college enrollment rates of male public high school students, especially Black and Hispanic men.