College Enrollment and Completion: Trends for Boston Public School Graduates
About Success Boston

Launched in 2008, Success Boston is Boston’s citywide college completion initiative. Together, the Boston Foundation, the Boston Public Schools, the City of Boston, the Boston Private Industry Council, 37 institutions of higher education, led by UMass Boston and Bunker Hill Community College, and local nonprofit partners are working to increase college completion for Boston’s students. In 2014, the Boston Foundation received a grant from the Corporation for National and Community Service to expand transition coaching, a core program of Success Boston. This $6 million Social Innovation Fund award provided the resources necessary to expand Success Boston’s transition coaching model from serving 300 to 1,000 students from each of the Boston Public Schools classes of 2015, 2016, 2017 and 2018. In 2022, Success Boston partners recommitted to the postsecondary success of all of Boston’s students, including the original goal of 70% college completion, and launched a new equity framework to guide the initiative. Central to it is a commitment to do whatever it takes to position all students, particularly Black and Latino students, for success, including a collective will to tackle structural barriers and build systems that are asset-based, deliver equitable outcomes, serve students effectively, and value their cultural wealth.

About the Boston Private Industry Council (PIC)

The Boston Private Industry Council (PIC) is the city’s Workforce Development Board and school-to-career intermediary. The PIC’s mission is to strengthen Boston’s communities and its workforce by connecting youth and adults with education and employment opportunities that align with the diverse needs of area employers. The PIC connects youth and adults with work and learning opportunities, conducts and analyzes labor market research, convenes industry groups to align education and hiring priorities and to develop pathways, measures the quality and outcomes of its initiatives, and recommends policy changes based on the results of its activities. For over 40 years, the PIC has collaborated with the Boston Public Schools, higher education, government, labor, and community organizations to develop and implement strategic priorities for increasing education, training, and employment options for Boston residents.

Acknowledgments

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and
Success Boston

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Introduction

The economic returns to a college degree are well known. College educated workers, on average, have higher employment rates, annual earnings, and lifetime earnings than their peers without a degree (Abel & Deitz, 2014). Despite these benefits to completing a college degree, many students who enroll in college do not graduate. Nationally, there are over 39 million adults who enrolled in college, but left before completing a degree (National Student Clearinghouse, 2022). The path toward a college degree is a complicated one with many factors beyond academic ones playing a role in credential completion rates. To assess progress on preparing high school graduates for the world of postsecondary education, there is a critical need for current and disaggregated data on college enrollment, persistence, and completion rate trends.

In partnership with the Boston Public Schools (BPS), the Boston Private Industry Council (PIC) and the former Center for Labor Market Studies at Northeastern University began using the National Student Clearinghouse (NSC) to track the college enrollment and completion experiences of the BPS Class of 2000. The first study released by the Boston Foundation in 2008, Getting to the Finish Line, found that only 35% (later revised to 39%) of the college enrollees from the BPS Class of 2000 had completed a degree within seven years of high school (Sum, 2008). The findings led to the launch of Success Boston—a citywide college completion initiative—with goals to increase the college graduation rate of the BPS Class of 2009 by 50% and double the rate to 70% for the Class of 2011. The PIC has prepared reports on the six-year college completion experiences of BPS classes to measure progress toward these goals, with the most recent studies focusing on the classes of 2009 and 2011 (McLaughlin 2016, McLaughlin 2018).

The purpose of this report is to provide an update on college enrollment and completion trends for BPS graduates. This update focuses on the six-year college completion outcomes for the BPS Classes of 2014 and 2015, and college enrollment trends for more recent graduating classes. The measurement of these key outcomes, including trends analysis, is designed to inform current systemic and programmatic strategies as well as new efforts to boost college enrollment and completion.
Data Sources and Key Definitions

This descriptive research study is based on two primary data sources: Boston Public Schools graduates’ records and the National Student Clearinghouse. To conduct this longitudinal study, the PIC received a de-identified list of BPS graduates from the Classes of 2014 to 2021. This list of graduates from each academic year includes data on the gender, race-ethnicity, and graduating high school. BPS also provides the PIC with a de-identified version of the NSC’s StudentTracker file, which is described below. Each file received has a unique ID to allow the PIC to create a de-identified longitudinal file containing demographic characteristics, high school attended, and post-secondary enrollment and credential records. Due to low numbers of graduates identified as “Native American” and “Mixed/Other” in the dataset, the race-ethnic disaggregation in this report displays results for only the four larger race-ethnic categories to protect confidentiality of graduates.

The NSC’s StudentTracker file provides semester-by-semester enrollment information for students identified in its database, including dates of enrollment; name of the college or university; location of the college (state); level of the institution (less than two-year, two-year, four-year); whether the college is public, private not for profit, or private for profit; and students’ full-time/part-time status. StudentTracker also identifies students reported by colleges and universities as graduates, and provides information on the date of graduation, type of certificate or degree earned, and field of study, if this detail is provided by the college or university to the NSC. NSC covers 98% of postsecondary institutions and 96% of U.S. college student enrollments. Despite the high institutional enrollment coverage rates, there are some limitations with NSC data. For example, college students may request information blocks under the Federal Education Rights and Privacy Act (FERPA), which means their college enrollment and degree outcome data would not be available in the StudentTracker detail report. The information block rate for enrollment at Massachusetts institutions averaged 1.9% for the 2017-18, 2018-19, and 2019-20 academic years, half of the national average (National Student Clearinghouse).

To track college enrollment and completion outcomes for BPS graduating classes of 2014 to 2021 and compare them to previous analysis of BPS classes, this report relies on definitions and measures established in previous Success Boston research (McLaughlin, 2018). Specifically, college enrollment for each graduating class is tracked through the immediate fall and following spring semester (or college academic year) after high school graduation. This is referred to as first-year college enrollment or first-year enrollees. These first-year enrollee cohorts also serve as the denominator for all college completion rates reported in this study. College completion is defined as the attainment of a postsecondary credential, including postsecondary certificates, associate degrees, or bachelor’s degrees within six years. For example, first-year enrollees from the Class of 2015 are tracked through the spring/summer semesters of 2021 to calculate a six-year college completion rate.
Trends in College Enrollment Rates of BPS Graduating Classes

This section examines recent trends in the college enrollment rate of BPS graduating classes during the first year after high school graduation. The first-year college enrollment rates of BPS graduates have declined sharply over the past five years (Chart 1). For the Classes of 2014–2016, the college enrollment rate of BPS graduates averaged 67% with two out of every three graduates enrolling in college. The college enrollment rate climbed to nearly 70% for the Class 2017, which virtually tied the previous high of 70.5% for the Class of 2011. The college enrollment rate fell to 66% for the Class of 2018 and then further to 63% for the Class of 2019. The COVID-19 pandemic and subsequent transition to remote learning in the spring of 2020 likely reduced spring enrollment for the Class of 2019, though most graduates would have made enrollment decisions prior to school closures in March 2020. First-year enrollment rates declined further to 54.5% and 52.6% for the Classes of 2020 and 2021, which graduated from high school during the pandemic. As a result, the college enrollment rate fell 17 percentage points from the BPS Class of 2017 to the BPS Class of 2021. To put this decline in perspective, consider the following hypothetical. If the college enrollment rate for the Class of 2017 had not declined but instead held for the Class of 2021, there would have been 600 more Class of 2021 graduates enrolled in college during the 2021–22 academic year.

CHART 1
FIRST-YEAR COLLEGE ENROLLMENT RATE OF BPS CLASSES OF 2014–2021

Source: PIC analysis of NSC records
College Enrollment Rates by Gender and Race-Ethnicity

To examine differences in college enrollment rates across demographic characteristics, the college enrollment rates of student subgroups from the Class of 2021 are presented here. Within the Class of 2021, there are large differences in college enrollment rates across demographic groups. First-year enrollment among female students exceeded that of male students by 11.4 percentage points. Fewer than half of the males in the Class of 2021 enrolled in college during the year after high school (Chart 2).

Among the four major race-ethnic groups from the Class of 2021, first-year college enrollment rates were 43.2% for Latino graduates, 49.5% for Black graduates, 71.5% for White graduates, and 74.3% for Asian graduates (Chart 2). The first-year enrollment gap between Latino graduates and Asian graduates is 31.7 percentage points.

Table 1 shows changes in college enrollment rates since the Class of 2017, which represented a recent peak in college enrollment for BPS graduates. While college enrollment rates have fallen for males and females and each of the four major race-ethnic groups, the declines have widened race-ethnic disparities. For males and females, first-year enrollment rates declined by 17 percentage points. White graduates from the Class of 2021 had a college enrollment rate that was 5 percentage points lower compared to White students in the Class of 2017, the smallest decline among the four race-ethnic groups in this study. First-year college enrollment rates fell 12 percentage points for Asian graduates, but they still had the highest overall college enrollment rate. Latino and Black graduates have experienced college enrollment rate declines of between 18 and 19 percentage points from the Class of 2017 to 2021.

CHART 2
FIRST-YEAR COLLEGE ENROLLMENT RATE OF BPS CLASS OF 2021
BY GENDER AND RACE-ETHNICITY

Source: PIC analysis of NSC records
College Enrollment Rates by Type of Institution

What types of institutions do graduates enrolling in college attend? The NSC database provides information on the level of college attended and its public/private status. Chart 3 shows the percentage breakdown of where BPS Class of 2021 graduates enrolled in college during the year after high school. For the Class of 2021, 27.3% began college at a two-year public institution. The majority (72%) started at a four-year college with approximately an even split between four-year public institutions (35%) and four-year private institutions (37%).

### Table 1

<table>
<thead>
<tr>
<th>Group</th>
<th>BPS Class of 2017</th>
<th>BPS Class of 2021</th>
<th>Percentage Point Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>74.9%</td>
<td>58.3%</td>
<td>-16.5</td>
</tr>
<tr>
<td>Male</td>
<td>63.6%</td>
<td>46.9%</td>
<td>-16.7</td>
</tr>
<tr>
<td>Asian</td>
<td>86.3%</td>
<td>74.3%</td>
<td>-12.0</td>
</tr>
<tr>
<td>Black</td>
<td>67.9%</td>
<td>49.5%</td>
<td>-18.4</td>
</tr>
<tr>
<td>Latino</td>
<td>62.0%</td>
<td>43.2%</td>
<td>-18.8</td>
</tr>
<tr>
<td>White</td>
<td>76.7%</td>
<td>71.5%</td>
<td>-5.2</td>
</tr>
</tbody>
</table>

Source: PIC analysis of NSC records

### Chart 3

**Type of Postsecondary Institutions First Attended by BPS Class of 2021 Graduates**

- 2-year public: 27.3%
- 4-year public: 37.3%
- 4-year private: 35.2%

**Note:**
From the Class of 2021, 1,913 enrolled in college in the first year after high school graduation, based on NSC student-level records. Fewer than five graduates started at private two-year or less than two-year institutions and their 0.2% share is not shown here.
Trends in College Completion Rates of BPS Graduates

Success Boston’s North Star goal is to increase the six-year college completion rate for all BPS graduates who enroll in college to 70%. Following the release of the first college completion report on BPS graduates, Getting to the Finish Line (2008), Success Boston research has tracked graduating cohorts for six years after high school to align with national postsecondary completion research studies (Sum, 2008). Chart 4 shows the updated trends of six-year college completion rates for first-year enrollees from BPS graduating classes. The BPS Class of 2000 was the first high school class tracked using the NSC database and serves as the baseline for Success Boston’s college completion goals. The six-year completion rate of first-year college enrollees from the Class of 2000 was 40.6% (Sum, 2013). The college completion rates of first-year enrollees increased six percentage points to 46.8% for the Class of 2003 and continued to rise to a range of 48–50% for the Classes of 2006–2008. The Class of 2009, the class with a 52% completion rate goal target, reached a 51.3% completion rate. College completion rates hovered in the 50–51% range for several classes before reaching a high of 53.9% for the Class of 2012. For the Class of 2015, which reached the six-year completion mark in the spring of 2021, the completion rate is 52.2%.

College Completion Rates by Gender and Race-Ethnicity

Consistent with trends from the past decade, the gender gap in college completion of BPS graduates was substantial for the Class of 2014 and Class of 2015 (Table 2). Since the initial study on the BPS Class of 2000, female enrollees have been completing college credentials at higher rates than males. The college completion rate of Class of 2015 female first-year enrollees was 58.8% compared to 44.3% for males, a difference of 14.5 percentage points. A similar 15 percentage point gap occurred for the Class of 2014. These differences in both college enrollment and completion rates correspond to 250 more female college graduates than male college graduates from the Class of 2015 and 316 more for the Class of 2014.
CHART 4
TRENDS IN THE SIX-YEAR COLLEGE COMPLETION RATE OF FIRST-YEAR ENROLLEES, SELECTED BPS CLASSES, 2000–2015

Sources: (i) Getting Closer to the Finish Line (2013); (ii) PIC analysis of NSC data for the Classes of 2007-2015

TABLE 2
GENDER GAPS IN SIX-YEAR COLLEGE COMPLETION RATES OF FIRST-YEAR ENROLLEES, BPS CLASSES OF 2014 AND 2015

<table>
<thead>
<tr>
<th>BPS Class/ Gender</th>
<th>Total First-Year Enrollees</th>
<th>College Completers</th>
<th>College Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class of 2014</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1,234</td>
<td>721</td>
<td>58%</td>
</tr>
<tr>
<td>Male</td>
<td>938</td>
<td>405</td>
<td>43%</td>
</tr>
<tr>
<td><strong>Class of 2015</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1,167</td>
<td>686</td>
<td>59%</td>
</tr>
<tr>
<td>Male</td>
<td>981</td>
<td>435</td>
<td>44%</td>
</tr>
</tbody>
</table>

Source: PIC analysis of NSC records
Previous postsecondary longitudinal research also has found large differences in college completion rates of BPS graduates across race-ethnicity (McLaughlin, 2018). A similar pattern was found for the BPS Class of 2015. College completion rates for first-year enrollees from BPS Class of 2015 ranged from a high of 73.4% among White enrollees to a low of 42.0% among Latino college enrollees, a 31.4 percentage point gap (Chart 5). Asian enrollees had a college completion rate of 70.3% and Black enrollees had a completion rate of 42.6%. Further disaggregating sex by race-ethnicity reveals large gender differences within race-ethnic groups.

Chart 6 displays the college completion rates of the eight gender/race-ethnic subgroups ranked from highest to lowest. Females graduate from college at higher rates than males across all race-ethnic groups, but the gaps between female and male outcomes are smaller for White and Asian college enrollees (13.6 percentage points and 7.3 percentage points, respectively) than for Black and Latino enrollees (17.3 percentage points and 20.3 percentage points, respectively). Among the eight gender/race-ethnic subgroups, there is a 48 percentage point range between the lowest and highest college completion rates (30.9% for Latino males and 79.3% for White females).
College Completion Rates by Type of High School

Previous research studies on the college completion outcomes of BPS graduates have disaggregated the findings for high schools into two categories: exam and non-exam high schools (McLaughlin, 2016). These studies have found large differences in the college enrollment and completion experiences of exam school graduates and their peers from non-exam high schools. Given that the exam schools have selective academic admission requirements, it is expected that students from these high schools would enroll in and graduate from college at higher rates, on average, than their peers from other high schools. It is important to note that the findings in this section are not intended for evaluating the comparative effectiveness of exam and non-exam high schools.

Exam school graduates from the Class of 2014 and Class of 2015 continued to fare well in terms of completing college. For the Class of 2014, college completion of first-year enrollees from exam high schools was 80.1%, more than double the completion rate of 36.8% for first-year enrollees from non-exam high schools. For the Class of 2015, the college completion rate of exam high school first-year enrollees fell slightly compared to the Class of 2014 to 76.7%. Non-exam school first-year enrollees had a college completion rate of 38.1%. These differences in completion rates have held steady over the past several years. Very similar patterns occurred among the Class of 2009 and Class of 2011 (McLaughlin, 2018).

<table>
<thead>
<tr>
<th>BPS high school type</th>
<th>BPS Class of 2014</th>
<th>BPS Class of 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam</td>
<td>80.1%</td>
<td>76.7%</td>
</tr>
<tr>
<td>Non-exam</td>
<td>36.8%</td>
<td>38.1%</td>
</tr>
<tr>
<td>Percentage Point Difference</td>
<td>+43.3</td>
<td>+38.6</td>
</tr>
</tbody>
</table>

Source: PIC analysis of NSC records

College Completion Rates by Type of College Attended

Nationally, and in Massachusetts, college completion rates vary considerably by level of postsecondary institution. Two-year public colleges, which have open admissions policies, typically have lower college completion rates than four-year public and private institutions. On the other hand, college completion rates tend to be quite high for four-year colleges with very selective admissions. This section describes how BPS Class of 2014 and 2015 college enrollees fare at different types of institutions. As stated above in the analysis of high school types, this analysis is not intended to be a comparative effectiveness analysis of two-year, four-year public, and four-year private colleges and universities. The demographic characteristics, academic backgrounds, and motivations of BPS graduates will differ across institution type. These background characteristics independently influence the graduation rates of students at these types of institutions (Sum, 2013). However, understanding the differences in college completion rates of BPS graduates by type of college is critical for unpacking the aggregate results and for assessing progress toward Success Boston’s college completion goals.
The college completion rate analysis below is based on the type of institution that BPS Class of 2014 and 2015 graduates first attended. For example, if a BPS graduate started at a two-year community college but transferred to a four-year institution before earning a degree at the two-year institution, and later graduated from a four-year institution within six years, then the student would count as a college completer in the two-year public category. Thus, a completion is awarded to the first institution attended by a student. The NSC also uses this approach when disaggregating completion rates by level of institution. The intent of this is to acknowledge the roles played by the first institution, often a two-year college, in preparing students to transfer and complete degrees at another institution.

Table 4 displays six-year college completion outcomes of first-year enrollees by type of college. For the Class of 2014 and Class of 2015, 21% of the BPS graduates who began college at a two-year public institution during the year after high school graduation completed a credential at any institution within six years of enrolling. College completion rates were substantially higher for those enrolling in four-year public and private institutions. For the Class of 2014, 66% and 67% of enrollees completed a credential at four-year public and private colleges, respectively, within six years. Completion rates dipped for the Class of 2015, with 62% of those starting at four-year public institutions and 65% of those beginning at four-year private institutions completing a credential. The COVID-19 pandemic likely had more of an impact on the Class of 2015 as a higher share were enrolled in spring 2020 when many schools closed and switched to remote learning.

### Table 4

<table>
<thead>
<tr>
<th>Type of College</th>
<th>BPS Class of 2014</th>
<th>BPS Class of 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-year Public (n=562)</td>
<td>20.8%</td>
<td>20.6%</td>
</tr>
<tr>
<td>4-year Public (n=726)</td>
<td>65.8%</td>
<td>62.1%</td>
</tr>
<tr>
<td>4-year Private (n=858)</td>
<td>66.8%</td>
<td>64.6%</td>
</tr>
</tbody>
</table>

Source: PIC analysis of NSC data

Note: n= # of BPS Class of 2015 first-year enrollees.
To measure progress toward college completion rate goals for BPS graduating classes, Success Boston tracks the six-year college completion of BPS graduates who enroll in college during their first year after high school. This report provides an update on the completion rates for the BPS Classes of 2014 and 2015, which reached the six-year time horizon in spring of 2020 and 2021. Through six years, the college completion rate for the BPS Class of 2014 and Class of 2015 were 51.8% and 52.2%, respectively. College completion rates have plateaued at 51–52% for the 2009–2015 BPS graduating classes, with the exception of the Class of 2012 which reached 54%.

College enrollment rates were declining just prior to the pandemic and fell sharply for the BPS Classes of 2020 and 2021. While college enrollment rates dropped for all major gender and race-ethnic groups, Black and Latino graduates experienced the steepest declines. As a result, gender and race-ethnic disparities in college enrollment, which had been shrinking, have widened over the past five years. There are substantially fewer graduates enrolling in college, a recent development that has serious economic and social implications.

Similarly, the college completion outcomes for the BPS Class of 2014 and Class of 2015 reveal that gender and race-ethnic gaps in college completion persist. College completion rates for Black and Latino graduates still substantially lag those of their White and Asian peers. The analysis of college completion rates by high school and postsecondary institution types shows where students are experiencing more success and where more needs to be done to improve BPS graduates’ chances of attaining a postsecondary credential. On the high school side, 77–80% of the city’s exam school graduates enrolling in college earned a degree within six years. For BPS graduates from non-exam schools, the average college completion rates are in the 36–38% range. Completion rates ranged from 21% for those first enrolling at a two-year public college to mid-60% rates at 4-year public and private colleges.

Future studies in this research series will examine the college persistence of more recent BPS classes and what share of students who had stopped out of college later returned. The decline in BPS graduates enrolling in college coupled with plateauing college completion rates is worthy of close monitoring.
References


