Navigating the Maze
Understanding CPS Graduates’ Paths Through College

Jenny Nagaoka, Jee Sun Lee, Alexandra Usher, and Alex Seeskin
TABLE OF CONTENTS

1 Executive Summary
3 Introduction

Chapter 1
5 CPS Graduates’ College Transfers and Stop-Outs

Chapter 2
11 College Mobility Categories

Chapter 3
17 Student Groups and College Mobility Categories

Chapter 4
25 Visualizing Students’ Entire Six-Year Trajectories

Chapter 5
31 Implications
34 References
35 Appendices

ACKNOWLEDGEMENTS

The authors gratefully acknowledge the many people who contributed to this report. Dominique McKoy was an essential thought-partner throughout the process as we worked on framing, language, and structure. Other To&Through Project team members Shelby Mahaffie, Jen Ciok, Thomas Massion, Sanya Khatri, and May Malone all provided valuable input on our introduction. Paulina Torres-Orejuela, Mercedes Wentworth-Nice, Roy McKenzie, Gisselle Hernandez, and Samuel Nitkin contributed to the creation of the datasets that underpin this analysis. We presented to several external groups as we sought feedback on our core narrative, including the CPS College Compact, the To&Through Advisory Board, the CPS Office of College and Career Success, and members of the senior leadership teams from City Colleges of Chicago and Dominican University. In addition, Regina Pretekin, from the Network for College Success, gave essential feedback on several drafts. On an advanced draft of the report, we received very thoughtful feedback from Consortium Steering Committee Members Pranav Kothari, Nancy Chavez, and Greg Jones. We also want to thank members of the UChicago Consortium’s research review group, including John Easton, Elaine Alensworth, David Stevens, and Brian Diaz. Finally, the UChicago Consortium’s communications team, including Lisa Sall, Jessica Tansey, Jessica Puller, and Alida Mitau, in addition to May Malone from UEI Communications, were instrumental in the production of this report and its accompanying materials.

This report was supported by the Crown Family Philanthropies and Crankstart. We thank them for their support and collaboration on the To&Through Project. The UChicago Consortium gratefully acknowledges the Spencer Foundation and the Lewis-Sebring Family Foundation, whose operating grants support the work of the UChicago Consortium, and also appreciates the support from the Consortium Investor Council that funds critical work beyond the initial research: putting the research to work, refreshing the data archive, seeding new studies, and replicating previous studies. Members include: Brinson Family Foundation, CME Group Foundation, Crown Family Philanthropies, Lloyd A. Fry Foundation, Joyce Foundation, Lewis-Sebring Family Foundation, McCormick Foundation, McDougal Family Foundation, Polk Bros. Foundation, Spencer Family Foundation, Steans Family Foundation, Square One Foundation, and The Chicago Public Education Fund.

Executive Summary

Over the past decade, the college enrollment rate for Chicago Public Schools (CPS) graduates has steadily increased, but the college completion rate has remained relatively flat. At the same time, practitioners have realized that the “traditional” path through college—enrolling in one institution and remaining enrolled through graduation—is not the norm for most CPS graduates. In order to ensure more students who begin college finish with a diploma, we need to have a better understanding of what happens to students between the point at which they first enroll and the point at which they exit post-secondary education.

In this report, we begin unpacking this question by looking at six years of patterns of college enrollment, non-enrollment, and completion for the approximately 63,000 CPS students who graduated high school between 2010 and 2012. By examining the timing, type, and frequency of transitions students are experiencing, and how those differ by student groups, we hope to understand ways in which high schools can better prepare students to navigate the post-secondary landscape, where higher education needs to adjust their structures and supports, and where research should delve deeper to better understand why students are making the transitions we observe.

Key Findings

CPS graduates interacted with post-secondary education at many levels. About 46 percent of students enrolled in a four-year institution and 47 percent enrolled in a two-year institution at some point during their post-secondary journey, with 18 percent having enrollments in both a four-year and two-year institution. It was more common for CPS graduates to enroll in a four-year college and then transfer to a two-year college (29 percent of four-year college enrollees) than to enroll in a two-year college and transfer to a four-year college (22 percent of two-year college enrollees).

Stopping out—taking a semester off, sometimes followed by re-enrollment—was very common. 83 percent of immediate two-year college enrollees stopped out at least once within six years, as did 51 percent of immediate four-year college enrollees. For most students, this stop out occurred during the first two years of college. Approximately half of students who stop out do re-enroll, which indicates a desire to stay engaged with the post-secondary system. Importantly, however, around 90 percent of students who took at least one semester off from college did not complete a credential within six years.

CPS graduates had a wide range of enrollment patterns, with large differences in post-secondary outcomes. There were differences in immediate college enrollment and subsequent patterns of enrollment and stopping out across lines of race/ethnicity and gender. Young women had higher rates of both immediate enrollment and persistence than young men. Students from different race/ethnicity groups who made the same enrollment transition often had different next transitions, which served to further diverge their paths and ultimate outcomes.
Paths looked different for students completing four-year vs. two-year degrees. The vast majority of students who completed a four-year degree within six years were students who immediately enrolled in a four-year college and remained continuously enrolled until completion. On the other hand, students took a larger variety of paths to two-year degree or certificate completion.

The patterns we observe suggest that immediately enrolling in college is an important step to completing a degree within six years of high school graduation. Almost 90 percent of the students who completed some type of degree after six years made an immediate transition from high school to college. Put another way, over one-half of students who immediately enrolled in a four-year institution completed a credential within six years, compared to about one-quarter of students who immediately enrolled in a two-year institution, and less than 10 percent of students who did not immediately enroll.
Introduction

The metaphors used to talk about students’ journeys through college have changed as the understanding of those journeys, and the post-secondary landscape they take place in, have evolved. A pipeline, a road, a maze; each suggests a trajectory through college of varying directness and characterizes students’ experiences very differently. As we document in this report, the reality is that, like most graduates across the nation, the journey Chicago Public School (CPS) graduates experience through college is rarely a straight line between point A of enrollment and point B of graduation. Many students change colleges, sometimes multiple times, and many take semesters off, sometimes returning to college, sometimes not.

In the title of this report, we’ve chosen to use the term “maze” to represent the complexities, opportunities, and disruptions that characterize many students’ experience in post-secondary education.

In Chicago, the district and its schools, civic leadership, and the non-profit community have made huge investments to help more students start on the path through college. College-going has become the predominant post-secondary plan for CPS graduates; in 2018, 41 percent of CPS graduates enrolled in a four-year college immediately after high school graduation and 21 percent enrolled in a two-year college. The CPS rates are almost as high as the 2018 national immediate college enrollment rates—44 percent in four-year colleges and 26 percent in two-year colleges.1

It has become increasingly clear that guiding more students to post-secondary education is important, but it is not enough, given what students experience after enrolling in college, to change their likelihood of graduating from college. Among the 2010–12 CPS graduates we examine in this report, 36 percent immediately enrolled in a four-year college and about 54 percent of those students completed a college credential within six years, almost entirely bachelor’s degrees. For the same cohorts, 20 percent enrolled in a two-year college and around 26 percent of those students completed a college credential within six years, primarily associate degrees or certificates. As CPS’s college enrollment rates have increased over the past eight years, this represents an increase of more than 1,000 college graduates. But it also means that many more students are taking on a large financial burden without attaining a degree.

If we are to see more students who begin college end up with a college credential in hand, we will need to have a better understanding of what happens to students between the point when they first enroll in college and when they exit post-secondary education, either having completed or not completed a credential. In this report, we take a first step toward unpacking students’ experiences by creating a bird’s eye view of six years of patterns in enrollment, stop out (i.e., leaving college for at least one term), and completion in post-secondary institutions for the approximately 63,000 CPS students who graduated between 2010 and 2012.

While we do not provide an explanation as to why we see these patterns, we are illustrating patterns of transitions among four-year colleges, two-year colleges, and non-enrollment in this study. Specifically, we look

---
at when students stop out from college, how often they stop out, the type of transitions students make (between two- and four-year institutions and enrolled and not enrolled), and whether or not students complete a credential. We use the term “credential” to mean a bachelor’s degree, an associate degree, or a certificate. Almost all CPS graduates who complete a credential at a two-year college receive an associate degree rather than a certificate, and in this report, due to data limitations we combine certificates and associate degrees as two-year college completion.² By providing a high-level view of the patterns of college enrollment and non-enrollment of CPS graduates, we hope to prompt further inquiry and deeper understanding of why we see these patterns and what can be done in high schools and higher education to better position students to complete college. We know from previous research that students’ experiences in college and the barriers they face differ by student groups, especially across racial lines. By knowing more about the timing, type, and frequency of post-secondary transitions and how they differ by student groups, we can illuminate where higher education institutions and non-profits can focus resources to support students; where higher education institutions can adjust their policies and structures; how high schools can better prepare students to navigate the post-secondary landscape; and where we can delve deeper to better understand why students are making transitions on their post-secondary journeys.

In Chapter 1 of this report, we begin by showing the percentage of CPS graduates making transitions between two-year and four-year colleges and between enrollment and non-enrollment. In Chapter 2, we provide a set of mobility categories that classify students by their enrollment status immediately after high school, along with their first post-secondary transition. In Chapter 3, we examine how the mobility categories vary by students’ race/ethnicity, gender, and high school GPA and ACT scores. In Chapter 4, we provide visualizations that include students’ second transition point and also show whether students completed a college degree or certificate within six years. In Chapter 5, we describe the implications of our findings.
CHAPTER 1

CPS Graduates’ College Transfers and Stop-Outs

Key Takeaways

- About 46 percent of students enrolled in a four-year institution and 47 percent enrolled in a two-year institution at some point during their post-secondary journey, with 18 percent having experience enrolling in both a four-year and two-year institution at some point.

- It was more common for CPS graduates to enroll in a four-year college and then transfer to a two-year college (29 percent of immediate four-year college enrollees) than to transfer from a two-year to a four-year college (22 percent of immediate two-year college enrollees).

- Many students stopped out at some point within six years of starting college; 83 percent of immediate two-year college enrollees stopped out at least once within six years, compared to 51 percent of immediate four-year college enrollees.

- Around 90 percent of immediate four-year and two-year college enrollees who took at least one semester off from college did not complete a credential within six years.

Students begin college with the goal of completing a credential, but in reality, the path they take is rarely straightforward. Previous research has demonstrated how education transitions, whether or not they are planned, put demands on students to learn how to navigate the culture and rules of new institutions, develop new relationships, and figure out how they belong in their new environment. In higher education, transitions are sometimes further complicated by also requiring students to manage financial aid, transfer of credits or geographic relocation.

In this chapter, we begin to examine the complexities of the enrollment and non-enrollment patterns for 2010–12 CPS graduates and, when possible, provide national comparisons. We examine students’ mobility from a two-year to a four-year college, from a four- to a two-year college, moving from being enrolled to not enrolled for at least one semester (stopping out), being enrolled without stopping out (continuous enrollment), and transferring between two-year and four-year institutions without stopping out (direct transfer).

Specifically, we ask: how common is movement between two-year and four-year colleges? How common is it for students to take at least one semester off (“stopping out”)? When do students stop out from college for the first time? Do students who stop out return and complete college?

Throughout this report, we show the college mobility patterns of 2010–12 CPS graduates, a sample of approximately 63,000 students. The 2010, 2011, and 2012 cohorts are the three most recent years of CPS high school graduates with six years’ worth of college education.

4 For example, a study from NSC found that 20 percent of transfers among students who started in two-year public institutions and 40 percent of transfers from four-year public institutions occurred across state lines (Shaprio, Dundar, Wakhungu, Yuan, & Harrell, 2015).
5 These transfers are sometimes called “upward transfers” or “vertical transfer,” although we do not use these terms in our categorization of students in this report.
6 These transfers are sometimes referred to as “reverse transfers,” although we do not use these terms in our categorization of students in this report. The term reverse transfer can also refer to the transfer of credits from a four-year institution for the purpose of conferring an associate degree (Taylor, 2016).
7 See Appendix A for details about the demographic and academic characteristics of our sample.
enrollment and completion data available at the time of
this report, and six years is the convention for following
students’ completion of bachelor’s degrees. We only
include fall and spring terms, and do not include sum-
mer enrollments because nationally, many four-year
college students who enroll in a different institution
during the summer only remain for that term, and
then return to their home institution. In this report
examining how patterns of enrollment and non-enroll-
ment are related to completion, we focus on movement
between four-year and two-year colleges rather than
the lateral transfers across four-year institutions or
across two-year institutions, since prior research has
found that students making lateral transfers are equally
likely to complete a four-year degree as students who
remain in the same college.

FIGURE 1
About 18 percent of 2010-12 CPS Graduates Enrolled in Both a Two-Year and a Four-Year College Within
Six Years

Percentage of 2010-12 CPS graduates enrolled in two-year colleges, four-year colleges,
or both within six years, among immediate college enrollees

- 46% of students had enrollment at a 4-year college at some point
- 47% of students had enrollment at a 2-year college at some point

Note: Percentages may not total to 100 percent due to rounding.

8 For example, the U.S. Department of Education collects
rates of bachelor’s degree completion within six years
from four-year institutions.
9 About one-fourth of all student mobility from four-year
institutions to two-year institutions consisted of summer
swirlers, who returned to their starting institution in the
following fall term (Shaprio et al., 2015).
10 Further, research has shown that students making lateral
transfers tend to base their decision on personal preferences
around location, fit, and social circumstances rather than poor
performance in college, and tend to be from higher SES back-
grounds (Goldrick-Rab & Pfeffer, 2009; Taylor & Jain, 2017).
The difference between where students immediately enroll and where they experience enrollments over the course of six years suggests a lot of movement into, out of, and among colleges. Some of this movement may have been planned. Although students can complete certificates and associate degrees at two-year colleges, many students enroll in a two-year college with the intention of using it as a stepping stone to eventually attain a four-year degree. Among 2011 CPS graduates who initially enrolled in a two-year college immediately after high school, 77 percent had indicated as twelfth-graders that they were planning to complete a bachelor’s degree or higher, and 11 percent reported planning to complete their education career with a certificate or associate degree.\textsuperscript{11} Students often receive guidance around college choice that focuses on two-year colleges’ “transfer function” and portrays them as a financially and academically more accessible option for starting on the path to a four-year college degree.\textsuperscript{12}

The reality is that although we tend to think about movement between two-year and four-year colleges primarily in terms of planned transfers from a two-year college to a four-year college, it was more common for CPS graduates to enroll in a four-year college and then transfer to a two-year college. Among students who immediately enrolled in a four-year college, 29 percent transferred to a two-year college at some point within six years of high school graduation, while 22 percent of students who started at a two-year college transferred to a four-year college (Figure 2). That is, although 77 percent of two-year college enrollees planned to attain a four-year college degree, only 22 percent enrolled in a four-year college within six years of graduating from high school.

\textbf{FIGURE 2}

CPS Graduates Who Enrolled in a Four-Year College Were More Likely to Transfer to a Two-Year College Than Graduates Who Enrolled in a Two-Year College Were to Transfer to a Four-Year College

\begin{center}
Movement of 2010–12 CPS graduates who immediately enrolled in college between two-year and four-year colleges, within six years of high school graduation
\end{center}

\begin{table}
\begin{tabular}{|c|c|}
\hline
\textbf{TRANSFERS} & \\
\hline
2-Year to 4-Year College Transfer & 22\% \\
\hline
4-Year to 2-Year College Transfer & 29\% \\
\hline
\end{tabular}
\end{table}

\textsuperscript{11} Using students’ responses on the 2011 SEssentials Survey, when they were in twelfth grade. Survey response rates for students in this cohort who enrolled in a two-year college immediately after graduation was 70 percent.  

\textsuperscript{12} Taylor & Jain (2017).
Stopping Out and Continuous Enrollment

The path students took through college was often non-continuous. Stopping out was much more common among students who started at two-year colleges than students who first enrolled in four-year colleges. Of 2010–12 CPS graduates who made an immediate transition to a two-year college, most students (83 percent) stopped out at least once within six years or before completing a credential (see Figure 3). Stopping out was common among immediate four-year college enrollees as well; about one-half of students who started at a four-year college stopped out within six years (51 percent).

Many of these stop outs happened early in students’ college experience (Figure 4). Among immediate two-year college enrollees, about 20 percent did not return the spring of their first year and more than one-quarter did not return for the fall of their second year. Among immediate four-year college enrollees, 9 percent did not return for the spring semester of their first year and 11 percent did not return the fall of their second year. That is, 46 percent of immediate two-year college enrollees and 20 percent of immediate four-year college enrollees stopped out within one year of starting college.

Many students who stopped out from college continued their post-secondary education; 50 percent returned to college within six years. However, students who stopped out were much less likely to complete a credential within six years of high school graduation. Only 7 percent of immediate four-year college enrollees who stopped out completed a four-year degree and

FIGURE 3
Most Immediate College Enrollees Stopped Out At Least Once

Rate of immediate college enrollees who stopped out within six years of high school graduation, for 2010–2012 CPS graduates

Note: Stopping out refers to leaving college for at least one term, regardless of whether students return to college or not.

FIGURE 4
Almost One-Half of Immediate Two-Year College Enrollees Stopped Out Within One Year

Semester of first stop out, among 2010–12 CPS immediate college enrollees

Note: Stopping out refers to leaving college for at least one term, regardless of whether students return to college or not.
How Do Patterns of Transfer for CPS Graduates Compare to Students Nationally?

CPS graduates have similar patterns of transfer from a two-year college to four-year college to students across the country. Using a nationally representative sample, Horn and Skomsvold (2011) reported that approximately 80 percent of first-time two-year college students intended to earn a bachelor’s degree or higher, but only 23 percent transferred to a four-year college within five years. A A report from the National Student Clearinghouse found that about one-quarter of students who started at a two-year college transferred to a four-year college within six years. B Almost all of these students transferred before receiving a two-year college credential; only 3.2 percent of these students transferred after completing a certificate or associate degree. Some students may have changed their educational plans after enrolling in a two-year college. Using national data, Deil-Amen (2006) found that 21 percent of first-time community college students decreased their intentions from a bachelor’s degree to an associate degree or certificate, what has been referred to as the “cooling out process.” C

Using national data, Goldrick-Rab and Pfeffer found that 15.5 percent of students who started at a four-year college had transferred to a two-year college within 8 years of high school graduation. Some students did make their way back to a four-year college: 41 percent of students who made a reverse transfer returned to a four-year college. However, only 22 percent of students who made a reverse transfer completed a four-year degree. D

Another 7 percent completed a certificate or associate degree (Figure 5). Similarly, only 10 percent of immediate two-year college enrollees who stopped out completed an associate degree or certificate, and an additional 1 percent completed a four-year degree. The patterns we see here do not help us understand why students stop out, but stopping out is strongly associated with non-completion and may flag that a student is experiencing significant barriers. Around 90 percent of immediate four-year and two-year enrollees who took at least one semester off from college did not complete a credential within six years.

Other studies that examine the completion rates for students who did not take any terms off have found similar results. Goldrick-Rab and Pfeffer found that the rates of bachelor’s degree completion were highest among students who were continuously enrolled and never changed colleges (79 percent). 13 Another study found that students who are continuously enrolled were 23 percent more likely to complete their bachelor’s degree than students who stopped out. 14

FIGURE 5

Few Students Who Stopped Out Completed a College Credential

| Degree outcome, by fall enrollment status, for 2010–12 CPS graduates who stopped out |
|------------------------------------------|----------|
| Percent of 2010–12 CPS Graduates Who Stopped Out |
| Immediate 2-Year College Enrollees  | N=10,587 |
| Completed Bachelor’s Degree within 6 Years | 10% |
| Completed Associate Degree or Certificate within 6 Years | 88% |
| Completed No Degree within 6 Years | 7% |
| Immediate 4-Year College Enrollees  | N=11,571 |
| Completed Bachelor’s Degree within 6 Years | 7% |
| Completed Associate Degree or Certificate within 6 Years | 87% |
| Completed No Degree within 6 Years | 7% |

Degree Outcome:
- Completed Bachelor’s Degree within 6 Years
- Completed Associate Degree or Certificate within 6 Years
- Completed No Degree within 6 Years

Note: Stopping out refers to leaving college for at least one term, regardless of whether students return to college or not. Percentages may not total to 100 percent due to rounding.

B Shapiro et al. (2015).
D Goldrick-Rab & Pfeffer (2009). Authors used the term “reverse transfer” to refer to the process of transferring from a four-year to a two-year college.

14 Peter & Cataldi (2005).
Prior research has shown that patterns of mobility, particularly stopping out, are associated with student characteristics, although most research does not address larger institutional or structural inequalities that contribute to these patterns. For example, Rab (2004) found that non-Black students were more likely to stop out than their Black peers, while students from lower SES backgrounds were disproportionately more likely to stop out than their higher-SES peers. Goldrick-Rab and Pfeffer found that students from families with less formal schooling were disproportionately likely to transfer from a four-year to a two-year college, compared to their equally-prepared peers, largely because they were more likely to struggle academically in their first year of college.\(^{15}\)

More than one-third of CPS students who stopped out from college returned after one term (7,596 students). However, among students who stopped out for one term, only one-quarter completed any credential and 10 percent completed a four-year degree (see Figure 6). Students who took more terms away from college were even less likely to complete a four-year degree, although the difference in students’ likelihood of completing a two-year credential if they stopped out for one vs. two terms was slight (15 percent vs. 13 percent).

In this chapter, we began to describe the complexities of the path students take through college. In the next chapter, we introduce categories of students’ patterns of mobility and categorize CPS graduates based on their enrollment status immediately after high school and their first transition within two years. By providing a simple and clear structure for describing the mobility patterns early in students’ post-secondary careers, we hope to help others, particularly in higher education, gain a better understanding of students’ movement in, out, and among colleges so that they can more effectively support students.

**FIGURE 6**

Only One-Quarter of Students Who Took One Term Off Completed a Credential

<table>
<thead>
<tr>
<th>Number of terms stopped out, by degree outcome within six years of high school graduation for immediate college enrollees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returned After 1 Term</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>N=7,596</td>
</tr>
<tr>
<td>10%</td>
</tr>
<tr>
<td>15%</td>
</tr>
<tr>
<td>75%</td>
</tr>
</tbody>
</table>

Degree Outcome:
- **Completed Bachelor’s Degree within 6 Years**
- **Completed Associate Degree or Certificate within 6 Years**
- **Completed No Degree within 6 Years**

Note: Stopping out refers to leaving college for at least one term, regardless of whether students return to college or not. Data is for 2010-12 CPS graduates. Percentages may not total to 100 percent due to rounding.

\(^{15}\) Goldrick-Rab & Pfeffer (2009).
CHAPTER 2

College Mobility Categories

Key Takeaways

- CPS graduates had a wide range of enrollment patterns over the course of six years after high school graduation. Even among students who were in the same college enrollment category in the fall immediately following high school graduation (i.e., immediately enrolled in a four-year, immediately enrolled in a two-year, did not immediately enroll), there were large differences in post-secondary outcomes.

  - Among students who immediately enrolled in college, students who were continuously enrolled in the same level of institution for two years had the largest share of students completing a post-secondary credential.
  - Students who stopped out as their first transition (as opposed to transferring between institution types) were the least likely to complete a post-secondary credential.
  - The patterns we observe suggest that immediately enrolling in college is an important step to completing a degree within six years of high school graduation. Factors associated with a student immediately enrolling in college may also be associated with persistence and completion.

- Of the students who immediately enrolled in either a four-year or a two-year institution the fall after graduation, 44 percent completed some type of degree or credential after six years.

  - Of the students who did not immediately enroll, 41 percent did eventually enroll, but only 8 percent had completed a degree or credential after six years.
  - To look at it another way, 88 percent of the students who completed some type of degree after six years made an immediate transition from high school to college.

  - What has historically been considered the “traditional” path—continuously enrolling in one post-secondary institution until completion—was not common for the students in our sample, even for those who enrolled immediately in the fall after high school graduation. While helping students become established on their best post-secondary path is crucial, it does not mean that path will be fixed or stable. The most common first transition among CPS graduates who immediately enrolled in college was stopping out (31 percent of four-year enrollees and 57 percent of two-year enrollees).

In this chapter, we continue to follow the three most recent cohorts of CPS graduates for whom we have six years’ worth of college enrollment data (2010, 2011, and 2012 graduating classes) to expand our understanding of enrollment patterns beyond the individual transitions we explored in Chapter 1. This approach allows us to explore the diverse ways in which students engage with post-secondary institutions over time, and how these transitions relate to post-secondary outcomes. In particular, we ask: what are individual students’ paths through post-secondary institutions over the course of six years? What patterns emerge around their transitions? How do these patterns relate to post-secondary outcomes?

Through descriptive analyses, we created a college mobility framework that serves to make sense of complex transitions by showing both the frequency and direction of certain patterns of college transitions early after high school graduation. This framework also shows the six-year college degree outcomes associated with these different transitions. While we are unable to make direct causal claims about the effect of specific transitions on credential completion, the framework can prompt individuals and institutions invested in the higher education of CPS graduates to ask why these patterns are present, what is driving them, and what barriers or supports may be facilitating or hindering students’ paths through college.
These mobility categories are neither prescriptive nor predictive. They do not fully capture the complexity of students’ college enrollment patterns, and we are not able to say in this study whether it is the transitions themselves that affect degree outcomes or whether the transitions are symptoms of other factors that support or hinder college completion. Nevertheless, it is important to be able to describe these patterns and raise questions about why they exist, what effect they have on student outcomes, and what changes may better support students to complete degrees or certificates.

Defining College Paths
Both national trends and trends among CPS graduates show that transitioning from college enrollment to non-enrollment or between institutions is common. In addition to knowing how often transitions occur, we also wanted to better understand the sequence of transitions students take along their college paths over a six-year time period. In order to do this, we needed to establish a way to define different college paths that would allow us to create groups of students who had similar paths and compare across their outcomes.

We define a college path as a term-by-term combination of enrollment and non-enrollment in two-year and four-year institutions over the course of six years after high school graduation. For example, one path through 12 semesters of college is illustrated in Table 1 below.

When examined on a term-by-term level, the approximately 63,000 graduates in our sample took more than 6,000 distinct paths. Because students are engaging with post-secondary institutions in such a wide variety of ways, we developed a set of categories for grouping students with similar paths in order to observe larger patterns of enrollment among CPS graduates.

### Table 1

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term 1</td>
<td>Term 2</td>
<td>Term 3</td>
<td>Term 4</td>
<td>Term 5</td>
<td>Term 6</td>
</tr>
<tr>
<td>Enrolled in a 2-Year</td>
<td>Enrolled in a 2-Year</td>
<td>Enrolled in a 2-Year</td>
<td>Enrolled in a 4-Year</td>
<td>Enrolled in a 4-Year</td>
<td>Enrolled in a 2-Year</td>
</tr>
<tr>
<td>Term 7</td>
<td>Term 8</td>
<td>Term 9</td>
<td>Term 10</td>
<td>Term 11</td>
<td>Term 12</td>
</tr>
<tr>
<td>Enrolled in a 4-Year</td>
<td>Not Enrolled</td>
<td>Enrolled in a 2-Year</td>
<td>Enrolled in a 2-Year</td>
<td>Enrolled in a 2-Year</td>
<td></td>
</tr>
</tbody>
</table>

In Table 1, we illustrate an example college path over six years (12 semesters) following high school graduation. This method for analyzing patterns of enrollment draws from Crosta’s (2014) analysis of community college students. However, our approach differs from Crosta’s in that we include enrollments from multiple four-year and two-year institutions and do not include enrollment intensity (i.e., full time/part time) or summer terms. Other studies have shown that summer enrollments are prevalent among students (Adleman, 2006; Crosta, 2014). Within our own sample, 31 percent of students had at least one term of summer enrollment, but our data do not include information about credit accumulation toward a credential. Patterns of enrollment and transfer in summer terms, and the reasons for enrollment and non-enrollment during summer terms, differ from other terms so we decided not to include summer terms in this analysis.
We chose to categorize students based on their first transition within two years for the following reasons:

1. **Most likely time frame for stopping out:** The most common transition we saw among CPS graduates was stopping out, and most students who stopped out had done so by the spring term two years after high school graduation. Additionally, while we saw a spike in the number of students stopping out for the first time between the first and second year after high school graduation, we did not see a parallel spike in subsequent academic years. If we only considered a one-year time frame, we would not have captured these important transitions that occurred between the first and second academic years.

2. **Midpoint for immediate four-year enrollees:** Most CPS graduates who do immediately enroll in college do so into a four-year institution. Therefore, for most students who immediately enroll, two-year persistence marks the halfway point to completion, and is a stronger indicator of college completion than a one-year persistence rate.

3. **Shared space for high school and higher education practitioners:** We wanted to choose a time frame that would encompass a sense of shared responsibility between high school and higher education. By two years after high school graduation, high school practitioners could still feasibly be in contact with their alumni; at the same time, colleges would have enough time to identify any early signs of needed support for students during their transition into college.

### Why Consider the First Transition Within Two Years?

Table 2 defines the 10 different college mobility categories. Students are first grouped according to whether they immediately enrolled in college, and if so, into what type of college.

Students who immediately enrolled in college are grouped based on whether they did one of the following in the first two years: 1) persisted in the same type of institution they started in; 2) transferred institution types; or 3) stopped out.

Students who did not immediately enroll in college are grouped based on whether they did one of the following: 1) enrolled in a four-year college within two years of high school graduation; 2) enrolled in a two-year college within two years of high school graduation; 3) enrolled in a four- or two-year college for the first time more than two years after high school graduation; or 4) did not enroll within six years. Each row of Table 2 represents a college mobility category and the share of students within the three different college completion outcomes.

These mobility categories can be useful in becoming aware of and challenging assumptions about the commonness and viability of different paths through college, especially the normative idea of being continuously enrolled at one institution and graduating with a bachelor’s degree. This, in turn, can inform how practitioners in both the high school and higher education spaces think about supporting students and reflect on how the current system must be re-imagined to better serve all students.

In the next chapter, we explore the race/ethnicity, gender, and high school GPA and ACT scores of students in these different mobility categories. By doing so, we highlight differences in enrollment patterns among student groups, which can provide insight into the types of supports different students may need while on the path to college completion.
<table>
<thead>
<tr>
<th>College Mobility Category</th>
<th>% Completed a 4-Year Degree in 6 Years</th>
<th>% Completed a 2-Year Degree or Certificate in 6 Years</th>
<th>% Did Not Complete a Degree or Certificate in 6 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately Enrolled in a Four-Year College (n=22,815)</td>
<td>48%</td>
<td>6%</td>
<td>46%</td>
</tr>
<tr>
<td>Persisted in 4-Year (n=14,255)</td>
<td>72%</td>
<td>3%</td>
<td>25%</td>
</tr>
<tr>
<td>Transferred to 2-Year (n=3,039)</td>
<td>13%</td>
<td>18%</td>
<td>70%</td>
</tr>
<tr>
<td>Stopped Out (n=5,521)</td>
<td>6%</td>
<td>6%</td>
<td>88%</td>
</tr>
<tr>
<td>Immediately Enrolled in a Two-Year College (n=12,562)</td>
<td>7%</td>
<td>19%</td>
<td>74%</td>
</tr>
<tr>
<td>Transferred to 4-Year (n=351)</td>
<td>38%</td>
<td>9%</td>
<td>53%</td>
</tr>
<tr>
<td>Persisted in 2-Year (n=5,098)</td>
<td>13%</td>
<td>37%</td>
<td>50%</td>
</tr>
<tr>
<td>Stopped Out (n=7,113)</td>
<td>1%</td>
<td>6%</td>
<td>93%</td>
</tr>
<tr>
<td>Did Not Enroll in College in the Fall (n=27,303)</td>
<td>3%</td>
<td>5%</td>
<td>92%</td>
</tr>
<tr>
<td>Delayed Enrollment in 4-Year (n=1,374)</td>
<td>23%</td>
<td>5%</td>
<td>72%</td>
</tr>
<tr>
<td>Delayed Enrollment in 2-Year (n=6,530)</td>
<td>2%</td>
<td>12%</td>
<td>86%</td>
</tr>
<tr>
<td>Enrolled After 2 Years (n=3,377)</td>
<td>7%</td>
<td>12%</td>
<td>81%</td>
</tr>
<tr>
<td>No Enrollment within 6 Years (n=16,022)</td>
<td>0%</td>
<td>1%</td>
<td>99%</td>
</tr>
</tbody>
</table>

Note: Data is for 2010-12 CPS graduates. Percentages may not total to 100 percent due to rounding. The college completion outcome “% Completed a 2-year Degree or Certificate in 6 Years” does not include students who completed both a two-year and four-year degree. Students were attributed to their highest degree completed. Therefore, if a student completed both a four-year degree and a two-year credential, they are grouped in the “four-year degree” outcome.

* Though it is rare for students who immediately enroll in a four-year institution to earn a college credential within two years of high school graduation, it is possible. One reason is that some four-year institutions offer programs that take two or fewer years to complete. Another reason is that students at CPS high schools can complete college credits while in high school through a partnership with the City Colleges of Chicago and other colleges, and so may graduate from high school having already earned many credits toward a college degree.

** While we do not have observable records of college enrollment for these students, that does not necessarily mean that these students did not ever enroll in college. Only enrolling during summer terms, enrolling in an institution that does not report to the National Student Clearinghouse (NSC), requesting a FERPA block on one’s records to prevent them from being reported to the NSC, or being incorrectly matched by the NSC algorithm are all plausible reasons for students appearing as though they did not enroll in college during this time when they, in fact, did enroll. Additionally, some institutions do not report college records for undocumented students.
Table 2 Takeaways

There was wide variation in completion outcomes among students in different college mobility categories.

**Among students who immediately enrolled in a four-year college:**

- For the first two years, 62 percent were continuously enrolled in a four-year college, 13 percent transferred to a two-year, and 24 percent stopped out within two years of starting college.
- Students in the “Persisted in 4-yr” group had the highest degree completion, with 75 percent of students completing some form of post-secondary credential.
- Fewer than one-third of students in the “Transferred to 2-yr” and “Stopped Out” groups completed a post-secondary credential (31 percent and 12 percent respectively).

**Among students who immediately enrolled in a two-year college:**

- The majority (74 percent) did not complete a post-secondary credential.
- Students in the “Transferred to 4-yr” and “Persisted in 2-yr” had much higher completion rates (47 percent and 50 percent respectively), with over one-third of students in the “Transferred to 4-yr” group having completed a four-year degree; however, it is also important to note that very few students are in the “Transferred to 4-yr” group.17
- Nearly all (93 percent) of the students who immediately enrolled in a two-year college and stopped out did not complete a post-secondary credential.

**Among students who did not immediately enroll in college:**

- Within two years, 5 percent had enrolled in a four-year college and 24 percent had enrolled in a two-year college.
- Only 8 percent of students completed a post-secondary credential.
- While low completion rates were somewhat expected given that students who delayed enrollment did not have as much time to complete a credential, only 28 percent of students in the “Delayed Enrollment in a 4-year” group and 14 percent of students in the “Delayed Enrollment in a 2-year” group completed a post-secondary credential, despite having enrolled within two years of high school graduation.
- Students who enrolled later than two years after high school graduation completed a credential at a rate of 19 percent, with slightly higher completion rates for two-year credentials than four-year degrees (12 percent vs. 7 percent, respectively).

---

17 While we look here at only the first four terms, we did see in our data that the number of students who transferred to a four-year college by the fifth term dramatically increased. Our data also suggests that students who remained in a two-year college for the first four semesters were more likely to have earned a two-year credential. Specifically, 4 percent of students who transferred to a four-year college during the first four semesters completed a two-year credential before or during the term they first enrolled in a four-year institution, while 62 percent of students who persisted in a two-year college for the first four semesters but later transferred to a four-year institution completed a two-year credential before or during the term they first enrolled in a four-year institution.
Previous research on students’ college enrollment patterns has developed a variety of methodologies for defining college paths and grouping students into them, some depending on the characteristics of students in the study (e.g., students who start in a four-year institution vs. community college students), and others depending on the characteristics of those students’ enrollments (college type, concurrent enrollment, course load, etc.). Our method is a descriptive approach, meaning that we map out each term of students’ enrollments in order to understand how sequences of transitions played out, rather than trying to use any one transition to predict students’ degree outcomes. By taking a descriptive approach, we are able to depict the flow of students’ movement over six years to observe larger patterns of movement among CPS graduates.

Our methodology for developing mobility categories is unique because it provides a different insight into what kinds of transitions happen early in students’ post-secondary careers. Much of the literature on college enrollment patterns focuses either on patterns of transfer between institutions or patterns of enrollment and non-enrollment in isolation. However, as will be shown later, many students experience some combination of transferring and non-enrollment. Even studies that do consider the intersection between transferring and non-enrollment focus on the presence of these patterns, rather than the sequence in which these transitions occur.

By using a sequential approach that considers both patterns of transfer as well as patterns of enrollment and non-enrollment, we offer a new approach to explore differences between students who experience different first transitions (the focus of Chapter 3) and to better understand how a progression of transitions, rather than a single transition, relates to degree/credential completion (explored in Chapter 4).

Furthermore, previous studies often group students by college freshmen cohort or when they started at a particular “home” institution rather than by when they graduated from high school. By cohorting based on high school graduating class, we are able to better differentiate the enrollment patterns between students who did immediately enroll in college and students who did not immediately enroll. We also are able to observe the characteristics of students who did not enroll in college at all within six years after high school graduation.
CHAPTER 3
Student Groups and College Mobility Categories

Key Takeaways

- There were differences in immediate college enrollment across lines of race/ethnicity. However, equally impactful were differences in mobility within each initial enrollment category. In other words, students from different race/ethnicity groups who all made the same enrollment transition often had different next transitions, which served to further diverge their paths.
- Young women were more likely to both immediately enroll and to persist than young men, both in four-year and two-year colleges. Also, of non-immediate enrollees, young men were more likely to have no enrollment within six years.
- Patterns in GPA and ACT scores were similar to one another—the majority of students who persisted in a four-year college had GPAs above 3.0 and ACT scores above 20—though there was slightly more variation in ACT scores across mobility groups.

In this section, we examine more closely the 10 mobility categories described in Chapter 2 (see Table 2 on p.14) to understand how students in our sample are grouped within these categories along lines of race/ethnicity, gender, and academic achievement. We explore the data by calculating the percentage of each student group that falls into each immediate enrollment category, and then determine what percentage of those students were subsequently in each mobility category. This allows us to identify important trends in both enrollment and mobility that differed across student characteristics.

We hope to highlight that access to opportunity and the structural barriers faced by different groups of students are not the same across lines of race, gender, or prior achievement. Similarities and differences within and across groups have important implications for focusing supports to increase equity of outcomes for all students. Further, it is important to note that the patterns we observe are shaped by the inequitable educational, political, and economic systems students are navigating within. There is a long history and present reality of systemic racism, both in Chicago and across the country, that has included intentional disinvestment in communities of color. Any differences that we observe across lines of race and ethnicity are due to a history and ongoing reality of racist and oppressive policies and structures, and those patterns should not be attributed solely to students’ choices, abilities, or background characteristics.

The demographic data we have is limited and imperfect. Historically, CPS data has grouped students into one of two gender categories—male and female—which do not accurately represent all CPS students. Additionally, the race/ethnicity categories available in our data do not accurately reflect the full spectrum of races and ethnicities embodied by CPS students, conflate the two separate constructs of race and ethnicity, and mask diversity within racial groups. We hope in the future to be able to report data that more fully and accurately describes the identities of CPS students. Lastly, we know that students’ academic qualifications have implications for their post-secondary paths, and to better understand that relationship, we examine the mobility groups as they relate to students’ GPAs and ACT scores. Although high school GPA is a stronger predictor of post-secondary success than are standardized test scores, we do not have GPA data available for all CPS students, and so we include both GPA and ACT in our analysis.

18 For further breakdowns, see Appendix B.
19 Although current students in CPS take the SAT, the cohorts of students in this report took the ACT.
20 We do not currently have access to grades data for students attending charter schools. See Appendix C for more details.
Mobility Categories and Students’ Race/Ethnicity

Overall, 47 percent of students in our sample identified as Black, 39 percent as Latinx, 9 percent as White, 4 percent as Asian/Pacific Islander, and 1 percent as another race/ethnicity. Table 3 shows the percentage of students within each race/ethnicity category who immediately enrolled in a four-year college, immediately enrolled in a two-year college, and did not immediately enroll. Within each of those categories, Table 3 also shows students’ next transitions: whether they persisted, transferred, stopped out, or did not enroll within six years. This allows us to see how students’ paths diverged across lines of race/ethnicity, even for students who made the same transition after high school.

21 For further breakdowns, see Appendix B.
### TABLE 3
Breakdown of Race/Ethnicity Student Groups, by Mobility Category

<table>
<thead>
<tr>
<th></th>
<th>Total Sample</th>
<th>Black Students</th>
<th>Asian/Pacific Islander Students</th>
<th>Latinx Students</th>
<th>Multiracial Students</th>
<th>Native American/Alaskan Native Students</th>
<th>White Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students in Race/Ethnicity Category</td>
<td>62,680</td>
<td>29,432</td>
<td>2,804</td>
<td>24,133</td>
<td>511</td>
<td>188</td>
<td>5,593</td>
</tr>
<tr>
<td>% of Students Who Immediately Enrolled in a 4-Year</td>
<td>36%</td>
<td>37%</td>
<td>64%</td>
<td>29%</td>
<td>54%</td>
<td>34%</td>
<td>52%</td>
</tr>
<tr>
<td>% of Immediate 4-Year Enrollees Who:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persisted in 4-Year</td>
<td>62%</td>
<td>53%</td>
<td>83%</td>
<td>64%</td>
<td>68%</td>
<td>70%</td>
<td>81%</td>
</tr>
<tr>
<td>Transferred to 2-Year</td>
<td>13%</td>
<td>17%</td>
<td>7%</td>
<td>12%</td>
<td>13%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Stopped Out from 4-Year</td>
<td>24%</td>
<td>30%</td>
<td>9%</td>
<td>24%</td>
<td>19%</td>
<td>24%</td>
<td>12%</td>
</tr>
<tr>
<td>% of Students Who Immediately Enrolled in a 2-Year</td>
<td>20%</td>
<td>20%</td>
<td>15%</td>
<td>21%</td>
<td>15%</td>
<td>23%</td>
<td>18%</td>
</tr>
<tr>
<td>% of Immediate 2-Year Enrollees Who:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transferred to 4-Year</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
<td>2%</td>
<td>8%</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>Persisted in 2-Year</td>
<td>41%</td>
<td>32%</td>
<td>61%</td>
<td>46%</td>
<td>48%</td>
<td>58%</td>
<td>55%</td>
</tr>
<tr>
<td>Stopped Out from 2-Year</td>
<td>57%</td>
<td>65%</td>
<td>36%</td>
<td>52%</td>
<td>44%</td>
<td>42%</td>
<td>41%</td>
</tr>
<tr>
<td>% of Students Who Did Not Immediately Enroll in the Fall</td>
<td>44%</td>
<td>43%</td>
<td>21%</td>
<td>50%</td>
<td>31%</td>
<td>44%</td>
<td>30%</td>
</tr>
<tr>
<td>% of Students Who Did Not Immediately Enroll Who:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed Enrollment in 4-Year</td>
<td>5%</td>
<td>6%</td>
<td>11%</td>
<td>3%</td>
<td>8%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Delayed Enrollment in 2-Year</td>
<td>24%</td>
<td>28%</td>
<td>20%</td>
<td>20%</td>
<td>26%</td>
<td>24%</td>
<td>21%</td>
</tr>
<tr>
<td>Enrolled After 2 Years</td>
<td>12%</td>
<td>11%</td>
<td>17%</td>
<td>13%</td>
<td>11%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>Had No Enrollment Within 6 Years</td>
<td>59%</td>
<td>55%</td>
<td>52%</td>
<td>63%</td>
<td>55%</td>
<td>56%</td>
<td>58%</td>
</tr>
</tbody>
</table>

**Note:** Data is for 2010-2012 CPS graduates. Totals may not add to 100 percent due to rounding. CPS expanded its race/ethnicity categories in the 2010-11 school year to include a Multiracial option, and the Asian/Pacific Islander category was split into two categories: Pacific Islander/Hawaiian and Asian. Our groupings by race/ethnicity include Pacific Islander/Hawaiian students in the Asian category due to the small number of CPS students who are Pacific Islander/Hawaiian. Students who did not have a race/ethnicity category available are not shown because fewer than 20 students were in this category, making it difficult to reliably interpret rates.

**Table 3 Takeaways**

- Rates of continuous enrollment were high for Asian/Pacific Islander and White students.
- Latinx students were the least likely to enroll immediately into a four-year college, but for those who did, about two-thirds persisted through the first two years. Latinx students were also the most likely to not immediately enroll, and of those students, almost two-thirds had no enrollment within six years.
- Of students with available race/ethnicity information, Black students had the highest rates of stopping out, from both four-year and two-year colleges.
Mobility Categories and Students’ Academic Qualifications

Understanding how students in our sample are grouped into the enrollment and mobility categories across lines of race/ethnicity and gender illuminates the different structural barriers these students faced on their post-secondary paths. Next, we will examine the relationship between students’ mobility categories and their high school GPAs and ACT scores to understand the implications of prior academic qualifications on students’ post-secondary paths.

In general, looking at the makeup of mobility categories according to students’ average high school GPA and ACT scores shows patterns we might expect, given that both GPA and ACT scores are factors used for determining admission to many post-secondary institutions (see Figure 7 to Figure 12).

**FIGURE 7**

Mobility Categories Differed in the Distribution of Students’ High School GPA: Immediate 4-Year Enrollees

Breakdown of mobility categories by students’ GPA bands for 2010–12 CPS Graduates Who Immediately Enrolled in a 4-Year College

![Bar chart showing the distribution of mobility categories by GPA bands for students who immediately enrolled in 4-year colleges.](image)

**FIGURE 8**

Mobility Categories Differed in the Distribution of Students’ High School GPA: Immediate 2-Year Enrollees

Breakdown of mobility categories by students’ GPA bands for 2010–12 CPS Graduates Who Immediately Enrolled in a 2-Year College

![Bar chart showing the distribution of mobility categories by GPA bands for students who immediately enrolled in 2-year colleges.](image)
Mobility Categories Differed in the Distribution of Students’ High School GPA: Did Not Immediately Enroll

Breakdown of mobility categories by students’ GPA bands for 2010–12 CPS Graduates Who Did Not Immediately Enroll in College

High School GPA:

- 3.5 – 4.0 GPA
- 3.0 – 3.4 GPA
- 2.5 – 2.9 GPA
- 2.0 – 2.4 GPA
- 0.0 – 1.9 GPA
- Missing

Note: Data is for 2010–12 CPS graduates who did not attend charter schools, as we do not currently have access to grades data for students attending charter schools. See Appendix C for more details. GPAs are cumulative, unweighted high school graduating GPAs. Totals may not add to 100 percent due to rounding.

Figure 7-9 Takeaways

- Almost one-half of students who persisted in a four-year college had high school GPAs above 3.0, while students who immediately enrolled in a four-year college but transferred or stopped out had lower average high school GPAs.
- Students who immediately enrolled in a two-year college and students who did not immediately enroll had similar high school GPAs, with about one-quarter having GPAs over 2.5.
- Students who immediately enrolled in a two-year and transferred to a four-year college had slightly higher average high school GPAs than students who immediately enrolled in a two-year college and persisted for two years.
- 10 percent of students who had no college enrollment within six years had an average high school GPA above 3.0—a missed opportunity for high-achieving students.
### FIGURE 10
Mobility Categories Differed in the Distribution of Students’ ACT scores: Immediate 4-Year Enrollees

**Breakdown of mobility categories by students’ ACT scores for 2010–12 CPS Graduates Who Immediately Enrolled in a 4-Year College**

<table>
<thead>
<tr>
<th>Percent of Students in Mobility Category</th>
<th>Immediately Enrolled in 4-Year</th>
<th>Persisted in 4-Year</th>
<th>Transferred to 2-Year</th>
<th>Stopped Out from 4-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>24%</td>
<td>32%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>90%</td>
<td>19%</td>
<td>21%</td>
<td>17%</td>
<td>15%</td>
</tr>
<tr>
<td>80%</td>
<td>25%</td>
<td>23%</td>
<td>30%</td>
<td>28%</td>
</tr>
<tr>
<td>70%</td>
<td>22%</td>
<td>17%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>60%</td>
<td>8%</td>
<td>5%</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>50%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ACT Scores:**
- ≥ 24 ACT
- 21–23 ACT
- 18–20 ACT
- 15–17 ACT
- < 15 ACT
- Missing

**Note:** Data is for 2010–12 CPS graduates. ACT scores were from students’ eleventh grade year, unless students did not have an eleventh grade test score, in which case their twelfth grade test score was used. Totals may not add to 100 percent due to rounding.

### FIGURE 11
Mobility Categories Differed in the Distribution of Students’ ACT scores: Immediate 2-Year Enrollees

**Breakdown of mobility categories by students’ ACT scores for 2010–12 CPS Graduates Who Immediately Enrolled in a 2-Year College**

<table>
<thead>
<tr>
<th>Percent of Students in Mobility Category</th>
<th>Immediately Enrolled in 2-Year</th>
<th>Persisted in 2-Year</th>
<th>Transferred to 4-Year</th>
<th>Stopped Out from 2-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>3%</td>
<td>4%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>90%</td>
<td>7%</td>
<td>9%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>80%</td>
<td>16%</td>
<td>20%</td>
<td>19%</td>
<td>32%</td>
</tr>
<tr>
<td>70%</td>
<td>33%</td>
<td>34%</td>
<td>28%</td>
<td>39%</td>
</tr>
<tr>
<td>60%</td>
<td>33%</td>
<td>26%</td>
<td>33%</td>
<td>8%</td>
</tr>
<tr>
<td>50%</td>
<td>7%</td>
<td>6%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ACT Scores:**
- ≥ 24 ACT
- 21–23 ACT
- 18–20 ACT
- 15–17 ACT
- < 15 ACT
- Missing

**Note:** Data is for 2010–12 CPS graduates. ACT scores were from students’ eleventh grade year, unless students did not have an eleventh grade test score, in which case their twelfth grade test score was used. Totals may not add to 100 percent due to rounding.
Figure 10-12 Takeaways

• More than 40 percent of students who immediately enrolled in a four-year college had ACT scores above 20, while fewer than 10 percent of students who immediately enrolled in a two-year college or did not enroll had ACT scores that high.
• The “Persisted in 4-Year” category had, by far, the largest share of students with ACT scores at or above 24.
• Similar to average GPA, ACT patterns show a missed opportunity for high-achieving students; 7 percent of students who had no enrollment within six years had an ACT score above 20.

There are broad trends and important differences along lines of race/ethnicity, gender, and academic achievement that can be observed in these breakdowns, but the complexity of these patterns demonstrates that students’ demographic groups and academic achievement levels do not fully predict or explain their subsequent post-secondary paths. Additionally, although it is useful to understand students’ patterns of enrollment shortly after leaving high school in order to better identify and address structural barriers that may be contributing to differences in outcomes, these first transitions do not tell the full story. The following chapter will expand on the college mobility categories to examine students’ subsequent transitions as they continued on their college journeys.
CHAPTER 4

Visualizing Students’ Entire Six-Year Trajectories

Key Takeaways

- Post-secondary paths looked markedly different for students completing four-year vs. two-year credentials. The vast majority of students who completed a four-year degree within six years were students who immediately enrolled in a four-year college and remained continuously enrolled until completion. On the other hand, students took a larger variety of paths to two-year degree or certificate completion.

- Most students who immediately enrolled in a four-year college were continuously enrolled in a four-year college for the first two years, while about one-half of students who immediately enrolled in a two-year college stopped out within the first two years.

- While many students who stopped out from college did re-enroll at some point, most did not complete a credential within six years.

- Fewer than one-half of students who completed a two-year credential had immediately enrolled in a two-year college in the fall after high school graduation.

Chapters 2 and 3 introduced the college mobility categories and delved deeper into the question of which students were in each category. While these mobility categories lend insight into students’ paths shortly after leaving high school, these early transitions do not show the full picture of students’ six year trajectories nor their eventual credential outcomes. Given that many students made more than one transition (which is not uncommon across the post-secondary landscape), in this chapter we expand on the college mobility categories to include students’ first two transitions over the course of six years. Exploring two transitions gives nuance to patterns of post-secondary movement and shows the complexity of students’ enrollment patterns.

By highlighting transitions as sequences, we can ask questions such as: how common was it for students to be continuously enrolled until degree completion? If a student stopped out within the first two years, did they usually re-enroll? For students who enrolled after a gap year or two, did they stay enrolled? Each of the paths explored in this chapter reflects institutional structures and processes that students had to navigate. Although we cannot make causal claims about why certain paths led to certain outcomes, we hope that examining the data in this way will raise important questions about the institutional supports and barriers that may be causing some paths to be more viable than others.

Figures 13–15 are three versions of the same figure (which we will refer to as a “path map”) mapping out the six-year post-secondary paths of 2010–12 CPS graduates, followed by key takeaways. Each path map features one group of students: 1) those who immediately enrolled in a four-year college, 2) those who immediately enrolled in a two-year college, and 3) those who had no immediate enrollment. The path maps look at students’ enrollment status in the fall immediately following their high school graduation and show their movement through two defined time periods and their outcomes at the end of six years. These path maps highlight how common transitions are among CPS graduates, and show the wide variation in completion outcomes associated with different paths. An interactive version of these visualizations which also shows path maps for specific race/ethnicity and gender groups, is available under “Pathways Tool” on our To&Through Website: https://toandthrough.uchicago.edu/tool/.
Students’ status the fall immediately after high school graduation, while not destiny, was an important indicator of their eventual likely outcomes. Although we see CPS students making a multitude of transitions across the post-secondary space, we also see that many did eventually complete a degree or credential. These patterns suggest that the students in our sample were persistent and motivated to complete a degree, and that many continued in that pursuit despite barriers and setbacks. However, there were certain paths that were more often correlated with degree completion than others.

How to Read the Path Maps

Each of the three path maps in Figures 13–15 corresponds to a different category of enrollment in the fall after high school graduation: 1) immediate enrollment in a four-year college, 2) immediate enrollment in a two-year college, and 3) no immediate enrollment. The maps all follow the same structure, so all three can be read in the same way. The left-hand side of the map indicates the number and percent of students in a particular fall enrollment category. The portion of the path map under the “First Transition Period” headline shows the distribution of those students into college mobility categories. The color of the lines represents the different mobility categories, while the thickness of the lines represents the share of students who were in each mobility category.

Moving left to right, the next portion of the map under the headline “Next Transition Period” shows what happened to students next, after their first transition. This might have happened any time between the first transition and six-year mark after high school graduation, and could represent students’ first transition, second transition, or no transition (depending on whether they already had a transition in the previous segment). The colored boxes indicate students’ enrollment status at this next transition—either enrolled in a four-year, enrolled in a two-year, or not enrolled.

Continuing to move rightwards, each of the nine lines under the “Next Transition Period” is further split into three lines to show the college completion outcomes of students in that category. The rightmost side of the map shows students’ six-year degree outcomes. Students were attributed to their highest degree completed, meaning that if a student completed both a four-year degree and a two-year credential, they are grouped in the “four-year degree” outcome.

For example, when looking at Figure 13:

- The thick blue bar at the top of the figure that passes through the “Enrolled in a Four-Year College” box follows the share of students who immediately enrolled in a four-year college, were in the “Persisted in a Four-Year College” mobility category during the first two years, stayed enrolled in and graduated from a four-year institution within the remainder of the six year period.

- The thin blue line that splits off to pass through the “Enrolled in a Two-Year College” box represents the share of students who immediately enrolled in a four-year, were in the “Persisted in a Four-Year College” mobility category during the first two years, but then transferred to a two-year institution as their first transition after the initial two-year period. This line then divides across the three outcomes: completed a four-year degree; completed a two-year degree, or did not complete a degree within six years of high school graduation.

- The top green line that begins at the “Immediately Enrolled in a Four-Year College” bar represents students who were in the “Transferred to a Two-Year College” mobility category during the first two years, and then returned to a four-year institution as their next transition. This line also then divides across the three outcomes: completed a four-year degree; completed a two-year degree, or did not complete a degree within six years of high school graduation.

While some students did experience more than two transitions over the course of six years, the path maps only look at either the second transition (for students who have a transition during the first two years), or the first transition (for students whose first transition is after the two-year mark).
Figure 13 Takeaways

Forty-six percent of students who immediately enrolled in a four-year institution did not complete a degree or certificate within six years of high school graduation. Looking at the entirety of their paths through the two transition periods, there are several notable takeaways:

• The majority of students who completed a four-year degree were students who were continuously enrolled up until degree completion. The largest share of students who completed a four-year degree were those in the “Persisted in a Four-Year College” group who then remained continuously enrolled in a four-year college through the “Next Transition Period.”

• Most students who immediately enrolled in a four-year college were continuously enrolled in a four-year college for two years. Nearly 25 percent of students stopped out as their first transition, while 13 percent of students transferred to a two-year college.

• Many students in the “Persisted in a Four-Year College” group had a transition after two years, most commonly stopping out. Of the students who stopped out, only 17 percent went on to complete any degree within six years.

• The majority of students who were in the “Stopped Out” mobility category re-enrolled in college within six years of high school graduation, with most students re-enrolling in a two-year college. This suggests that stopping out early on is not necessarily an indication of permanent disengagement from college. Despite having overcome barriers to re-enrollment, however, most students on this path did not complete a degree or credential within six years, regardless of whether they re-enrolled in a two-year or four-year institution.
Figure 14 Takeaways

Of the 2010–12 graduates, approximately one-quarter of students who immediately enrolled in a two-year college completed a degree or certificate six years after high school graduation—and approximately three-quarters did not. By looking at the full picture of their pathways in the six years following high school graduation, we see that:

- Over one-half of students who immediately enrolled in a two-year institution stopped out as their first transition within two years. Forty-nine percent of these students did re-enroll in college, 90 percent into a two-year college. However, the majority of students who stopped out did not complete a degree or credential within six years.

- Very few students transferred to a four-year college as their first transition within two years. Of students who transferred to a four-year college by the next transition period, most did so after having been enrolled in a two-year college for two years.

- About one-half of students in the “Persisted in a Two-Year College” group stopped out after the two-year mark and did not complete a degree or credential, despite having been continuously enrolled for at least two years.
Almost one-half (44 percent) of students in the 2010-12 graduating classes did not enroll in college in the fall after high school graduation, and most of those students did not complete a degree or certificate within six years; 3 percent completed a four-year degree and 5 percent completed a two-year degree or certificate. However, this path map shows that many of these students did engage with higher education at some point, though most were not able to sustain enrollment:

- Most students who eventually enrolled did so within two years of high school graduation, mostly into a two-year college. For students who were in both the “Delayed Enrollment in a Four-Year College” and “Delayed Enrollment in a Two-Year College” mobility categories, the most common transition during the next transition period was to stop out.
- Around 25 percent of the 2010-12 graduating classes had no records of college enrollment during the six years after high school graduation. This suggests that, although CPS graduates’ college enrollment rates have been increasing over the last few years, the barriers between high school graduation and college enrollment still loomed large for many students.

Nagaoka & Seeskin (2019).
In addition to understanding how students progressed through the higher education landscape based on where they were in the fall after high school graduation, it is also helpful to look backward at what paths students took, based on where they ended up after six years. This illuminates the variety of pathways taken by students who ended up with the same outcome. For example, for the students who completed four-year degrees, we can look back and see where they were in the fall after high school graduation. We do this in Figure 16, comparing students who completed four-year degrees, those who completed two-year degrees, and those who did not complete a degree, and examining their differing enrollment statuses the fall after high school graduation.

**Figure 16 Takeaways**

- For most students, where they were the fall after high school graduation aligned with their completion status after six years. The majority of students who completed a four-year degree had immediately enrolled into a four-year college after graduating high school, while the majority of students who did not complete a degree had not enrolled anywhere the fall after graduation. Of students who completed a two-year degree, the largest percentage had immediately enrolled in a two-year college after graduation.

- The relationship between fall enrollment status and degree completion was the most noticeable for students who completed a four-year degree: 87 percent of those students had immediately enrolled into a four-year college after high school graduation.

- Students who completed a two-year degree had the widest variety of initial enrollment statuses, with about one-quarter having enrolled into a four-year college after graduation, almost one-third having not enrolled immediately after graduation, and the remaining 46 percent having enrolled into a two-year college after graduation.
CHAPTER 5

Implications

Compared to a decade ago, more CPS students are graduating high school and more CPS high school graduates are enrolling in college. However, college completion rates have remained flat over the last decade. While together this means that more students are completing post-secondary credentials, it also means that more students are attempting college and not completing a college credential. In this study, a little more than one-half of immediate four-year enrollees and less than 30 percent of immediate two-year enrollees completed any post-secondary credential within six years.

Yet the responsibility for completing college cannot lie entirely with students and their families. When low-income students and students of color stop out of college, they do so because they have compelling reasons that are often systemic in nature. Without a financial safety net and facing significant levels of debt, many face financial challenges, food insecurity, and family responsibilities. CPS graduates often attend in-state colleges, which have themselves experienced budget cuts that have strained their ability to provide counseling and academic support. Finally, some CPS graduates are the first in their families to attend colleges and are often building emerging identities amidst predominantly white campuses.

Indeed, the depth of the challenges facing CPS graduates is significant, and when they experience transitions like transferring or stopping out, CPS graduates are particularly vulnerable. Though we do not seek to provide prescriptive answers to these challenges, we do want to name some broad implications for education stakeholders in Chicago about how CPS graduates are moving through complex education systems, and how we can all work to create more inclusive learning environments and support structures.

Focus on Preventing Transitions in the First Place

One of the main findings of this report is that college transitions are prevalent for CPS graduates but that doesn’t mean that they are inevitable. For starters, the fact that students with lower GPAs and standardized test scores are more likely than their peers to experience transitions during college suggests that CPS can improve how it prepares its graduates for the academic rigors of college.

That said, much of the responsibility for preventing student transitions must lie with higher education institutions. These institutions can make public disaggregated data about which students do not return for a second year and whether these students transfer or stop out, and use this data themselves to better identify and address the root causes behind the exodus of so many first-time college students. This begins with understanding the college experiences of students of color, building systems for individualized support and creating spaces on campus where traditionally marginalized students feel safe, celebrated, and financially stable. With fewer financial resources and less social capital, CPS graduates may also need more
flexibility with fees, schedules, and bureaucracy, all of which can lead to disproportionate levels of anxiety, frustration, and exclusion for students of color. Finally, CPS graduates must also have multiple and varied opportunities to share their unique perspectives in classes and social life.

Reconsider Recruitment, Orientation, and Support
The data in this report suggest that in any given year, there are thousands of CPS graduates who will transfer institutions or return to college after stopping out. Though higher education institutions must work to reduce these numbers, some college transitions are inevitable, and we need better systems in place to reach the thousands of CPS graduates who stop out or transfer each year from college. For the many local higher education institutions who are struggling with declining enrollment, recruiting these students could be a lifeline—indeed, the fact that roughly one-half of students who stop out end up returning to college is a sign that despite often difficult circumstances, students have the motivation to complete degrees and certificates. However, improved recruitment is not enough if institutions don’t rethink the ways they orient and support students who have experienced transitions, reducing unnecessary bureaucracy and facilitating meaningful relationships. The findings in this report suggest that colleges and college success nonprofits can see transfers and stopping out as early warning indicators of non-graduation, and support students accordingly. In particular, students returning from stopping out or transferring in from a different institution require at least the same level of orientation and support that first-year students receive. Along those lines, our analysis showed that more than one-half of students enrolled in both a two-year and a four-year college at some point in the first six years after high school graduation, which suggests that higher education institutions must collaborate more with each other to improve articulation agreements to make the credit transfer process easier for this large share of students.

Improve Awareness of Common Myths About College Completion
Students, families, and educators deserve complete information about outcomes for past CPS graduates so that they can consider implications for their own, current decision making. Many of the reasons for transitions are beyond the control of students, but knowing that different outcomes are associated with different enrollment patterns can affect the choices students make and the challenges they are prepared for. Indeed, the findings from this report suggest that some myths may exist about persisting in and completing college. During the college choice process, adults supporting students should be clear themselves and clear with students about how CPS students actually move through higher education systems.

Myth #1: The Direct Path
The normative view of college—being continuously enrolled at one institution and graduating with a bachelor’s degree—is not typical for CPS graduates. Although some CPS students follow this path—and those who do make up the majority of the students who completed a degree or credential in our study—most CPS students transferred between colleges, stopped out, and/or delayed enrollment at some point during the six years after high school graduation. For K–12 and college educators who did not experience these transitions in their own college journeys, it will be critical to examine biases and redefine what is “normal” in order to empathize with, prepare, and support CPS students through this often-complicated experience.

Myth #2: Two-to-Four-Year College Transfer
Although Chicago wants and needs this path to work for students, the findings in this report suggest it’s not working, with only 22 percent of immediate two-year enrollees transferring to a four-year college and fewer than 7 percent completing a bachelor’s degree in six years. The relationship between CPS and City Colleges of Chicago is progressing due to efforts like the Chicago Roadmap, and there is real value in two-year degrees...
and certificates. However, until the transfer and completion rates improve, CPS needs to be direct with students that starting at a two-year college with the intent of transferring and completing a four-year degree has not been a successful pathway for most CPS graduates.

**Myth #3: Taking “Time Off School”**
Though it may sound inconsequential, our findings suggest that stopping out from college is both common and consequential. More than one in two immediate four-year enrollees and four out of five immediate two-year enrollees took at least one semester off of school. Many did not return, and those who did return had significantly lower outcomes than students who stayed; 90 percent of all students who stopped out did not complete a degree or credential. Indeed, for the most part, the only students who stopped out and still completed a degree were students who returned to college after only one semester off. For many CPS graduates, circumstances beyond their control drive the decision to take time off of college, but colleges need to do everything in their power to stay connected to students and remove barriers that cause students to stop out for more than one semester, or at all.

**Myth #4: Taking a Gap Year**
Taking a “gap year” has become popular with some high school graduates around the country, but the data in this report suggests that for many CPS students, delaying college enrollment results in lower completion rates: only 8 percent of students who delayed college enrollment completed a degree or credential. Not all CPS graduates have the resources or the support structures to enroll directly in college, but counselors should be wary of recommending time off to those who are able to directly enroll in college.

**Conclusion**
The prevalence of transfer and stopping out in this report paints the picture of a system that is largely failing our students and leads to serious questions about the role of higher education. For whom do our colleges exist? What could college and higher education policies look like if we started over and designed them to support first generation, low-income, and students of color? How can we address college costs and reduce the amount of debt students have when they leave college? There are no easy answers to these questions, but the findings in this report suggest that any response will require a whole-city approach grounded in the college experiences of CPS students.


Rosenkranz, T., de la Torre, M., Stevens, W.D., & Allensworth, E.M. (2014)  *Free to fail or on-track to college: Why grades drop when students enter high school and what adults can do about it.* Chicago, IL: University of Chicago Consortium on Chicago School Research.


Appendix A
Characteristics of the Sample

In Chapter 1, we briefly described the sample of students who were included in this report. Table A.1 provides further information on the students in the sample, both overall and by graduating cohort.

| TABLE A.1 |
| Study Sample: Student Demographics |
| --- | --- | --- | --- | --- |
| | Full Sample | CPS Graduating Class of 2010 | CPS Graduating Class of 2011 | CPS Graduating Class of 2012 |
| Total Students | 62,680 | 20,231 | 20,435 | 22,014 |
| Gender | | | | |
| Young Women | 55% | 55% | 55% | 55% |
| Young Men | 45% | 45% | 45% | 45% |
| Missing | 0% | 0% | 0% | 0% |
| Race/Ethnicity | | | | |
| Asian | 3% | NA | 5% | 4% |
| Asian/Pacific Islander | 1% | 5% | NA | NA |
| Black | 47% | 48% | 46% | 47% |
| Latinx | 39% | 37% | 39% | 40% |
| Multiracial | 1% | 0% | 1% | 1% |
| Native American/Alaskan Native | 0% | 0% | 0% | 0% |
| Pacific Islander/Hawaiian | 0% | NA | 0% | 0% |
| Race/Ethnicity Not Available | 0% | 0% | 0% | 0% |
| White | 9% | 10% | 9% | 8% |
| Missing | 0% | 0% | 0% | 0% |
| Average High School GPA | 2.32 | 2.29 | 2.33 | 2.33 |
| GPA Bins | | | | |
| 3.5 - 4.0 GPA | 7% | 7% | 7% | 7% |
| 3.0 - 3.4 GPA | 13% | 13% | 13% | 13% |
| 2.5 - 2.9 GPA | 18% | 18% | 17% | 17% |
| 2.0 - 2.4 GPA | 20% | 20% | 19% | 19% |
| 0.0 - 1.9 GPA | 32% | 34% | 32% | 31% |
| Missing | 10% | 8% | 11% | 12% |
| Average ACT | 18 | 17 | 18 | 18 |
| ACT Bins | | | | |
| ≥ 24 | 11% | 10% | 11% | 11% |
| 21 - 23 | 11% | 9% | 11% | 12% |
| 18 - 20 | 18% | 17% | 19% | 19% |
| 15 - 17 | 27% | 26% | 28% | 27% |
| <15 | 26% | 25% | 25% | 27% |
| Missing | 7% | 12% | 7% | 4% |

Note: Data is for 2010-2012 CPS graduates. Totals may not add to 100 percent due to rounding. CPS expanded its race/ethnicity categories in the 2010–11 school year to include a Multiracial option, and the Asian/Pacific Islander category was split into two categories: Pacific Islander/Hawaiian and Asian. Our groupings by race/ethnicity include Pacific Islander/Hawaiian students in the Asian category due to the small number of CPS students who are Pacific Islander/Hawaiian. Students who did not have a race/ethnicity category available are not shown because fewer than 20 students were in this category, making it difficult to reliably interpret rates.
Appendix B

Additional Data on Student Demographics and Mobility Groups

In Chapter 3, we presented data describing how students in our sample are grouped within the mobility categories along lines of race/ethnicity, gender, and academic achievement. We showed the percentage of each student group that falls into each immediate enrollment category, and subsequently into each mobility category. Tables B.1–B.4 provide further information by showing the inverse; that is, the percentage of each mobility category that is made up of students from each race/ethnicity, gender, or academic achievement group. For example, Chapter 3 answers the question “what percentage of Black students were in the ‘Persisted in Four-Year’ category?”, whereas Table B.1 below answers the question “what percentage of students in the ‘Persisted in Four-Year’ category were Black?” and likewise for gender (Table B.2). Table B.3 answers questions like “what percentage of students in a given GPA band were immediate four-year enrollees who persisted for two years in a four-year college?” and likewise for ACT bands (Table B.4).

### TABLE B.1
Mobility Categories by Race/Ethnicity of Students

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Asian/Pacific Islander</th>
<th>Latinx</th>
<th>Multiracial</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sample (N = 62,680)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediate 4-Year Enrollees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persisted in 4-Year (N = 14,255)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transferred to 2-Year (N = 3,039)</td>
<td>61%</td>
<td>4%</td>
<td>27%</td>
<td>1%</td>
<td>7%</td>
</tr>
<tr>
<td>Stopped Out from 4-Year (N = 5,521)</td>
<td>59%</td>
<td>3%</td>
<td>30%</td>
<td>1%</td>
<td>6%</td>
</tr>
<tr>
<td>Immediate 2-Year Enrollees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transferred to 4-Year (N = 351)</td>
<td>54%</td>
<td>4%</td>
<td>29%</td>
<td>2%</td>
<td>11%</td>
</tr>
<tr>
<td>Persisted in 2-Year (N = 5,098)</td>
<td>36%</td>
<td>5%</td>
<td>46%</td>
<td>1%</td>
<td>11%</td>
</tr>
<tr>
<td>Stopped Out from 2-Year (N = 7,113)</td>
<td>54%</td>
<td>2%</td>
<td>37%</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>Students Who Did Not Immediately Enroll</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed Enrollment in 4-Year (N = 1,374)</td>
<td>57%</td>
<td>5%</td>
<td>27%</td>
<td>1%</td>
<td>10%</td>
</tr>
<tr>
<td>Delayed Enrollment in 2-Year (N = 6,530)</td>
<td>55%</td>
<td>2%</td>
<td>37%</td>
<td>1%</td>
<td>5%</td>
</tr>
<tr>
<td>Enrolled After 2 Years (N = 3,377)</td>
<td>43%</td>
<td>3%</td>
<td>47%</td>
<td>1%</td>
<td>6%</td>
</tr>
<tr>
<td>No Enrollment Within 6 Years (N = 16,022)</td>
<td>44%</td>
<td>2%</td>
<td>48%</td>
<td>1%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Note: Table shows data for 2010-12 CPS graduates. Percentages may not total to 100 percent due to rounding. CPS expanded its race/ethnicity categories in the 2010–11 school year to include a Multiracial option, and the Asian/Pacific Islander category was split into two categories: Pacific Islander/Hawaiian and Asian. Our groupings by race/ethnicity include Pacific Islander/Hawaiian students in the Asian category due to the small number of CPS students who are Pacific Islander/Hawaiian. Students who did not have a race/ethnicity category available and Native American/Alaskan Native students are not shown because a small number of students were in this category, making it difficult to reliably interpret rates.
### TABLE B.2
Mobility Categories by Gender of Students

<table>
<thead>
<tr>
<th>Category</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Students (N = 62,680)</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Immediate 4-Year Enrollees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persisted in 4-Year (N = 14,255)</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>Transferred to 2-Year (N = 3,039)</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Stopped Out from 4-Year (N = 5,521)</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td><strong>Immediate 2-Year Enrollees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transferred to 4-Year (N = 351)</td>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td>Persisted in 2-Year (N = 5,098)</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Stopped Out from 2-Year (N = 7,113)</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Students Who Did Not Immediately Enroll</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed Enrollment in 4-Year (N = 1,374)</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>Delayed Enrollment in 2-Year (N = 6,530)</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Enrolled After 2 Years (N = 3,377)</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>No Enrollment Within 6 Years (N = 16,022)</td>
<td>47%</td>
<td>53%</td>
</tr>
</tbody>
</table>

*Note: Table shows data for 2010-12 CPS graduates. Percentages may not total to 100 percent due to rounding.*

### TABLE B.3
GPA Bands by Student Mobility Category

<table>
<thead>
<tr>
<th>GPA Band</th>
<th>Immediate 4-Year Enrollees</th>
<th>Immediate 2-Year Enrollees</th>
<th>Students Who Did Not Immediately Enroll</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Persisted in 4-Year</td>
<td>Transferred to 2-Year</td>
<td>Stopped Out from 4-Year</td>
</tr>
<tr>
<td></td>
<td>64%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>47%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>7%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>15%</td>
<td>6%</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>4%</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>24%</td>
<td>9%</td>
<td>13%</td>
</tr>
</tbody>
</table>

|          | Persisted in 2-Year        | Transferred to 2-Year       | Stopped Out from 2-Year                |
|          | 0%                        | 6%                         | 2%                                    |
|          | 1%                        | 8%                         | 5%                                    |
|          | 0%                        | 9%                         | 8%                                    |
|          | 1%                        | 10%                        | 13%                                   |
|          | 1%                        | 7%                         | 17%                                   |
|          | 0%                        | 6%                         | 11%                                   |

<table>
<thead>
<tr>
<th></th>
<th>Delayed Enrollment in 4-Year</th>
<th>Delayed Enrollment in 2-Year</th>
<th>Enrolled After 2 Years</th>
<th>No Enrollment Within 6 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>4%</td>
<td>4%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>8%</td>
<td>5%</td>
<td>19%</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>12%</td>
<td>6%</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>16%</td>
<td>7%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>8%</td>
<td>5%</td>
<td>23%</td>
</tr>
</tbody>
</table>

*Note: Table shows data for 2010-12 CPS graduates. Percentages may not total to 100 percent due to rounding.*
### TABLE B.4
ACT Bands by Student Mobility Category

<table>
<thead>
<tr>
<th></th>
<th>≥ 24</th>
<th>21–23</th>
<th>18–20</th>
<th>15–17</th>
<th>&lt; 15</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=6,775</td>
<td>N=6,634</td>
<td>N=11,484</td>
<td>N=16,915</td>
<td>N=16,289</td>
<td>N=4,583</td>
</tr>
<tr>
<td>Immediate 4-Year Enrollees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persisted in 4-Year</td>
<td>67%</td>
<td>45%</td>
<td>29%</td>
<td>14%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Transferred to 2-Year</td>
<td>5%</td>
<td>8%</td>
<td>8%</td>
<td>5%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Stopped Out from 4-Year</td>
<td>8%</td>
<td>12%</td>
<td>13%</td>
<td>10%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Immediate 2-Year Enrollees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transferred to 4-Year</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Persisted in 2-Year</td>
<td>3%</td>
<td>7%</td>
<td>9%</td>
<td>10%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Stopped Out from 2-Year</td>
<td>2%</td>
<td>5%</td>
<td>9%</td>
<td>14%</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>Students Who Did Not Immediately Enroll</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed Enrollment in 4-Year</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Delayed Enrollment in 2-Year</td>
<td>2%</td>
<td>6%</td>
<td>8%</td>
<td>12%</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Enrolled After 2 Years</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
<td>6%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>No Enrollment Within 6 Years</td>
<td>7%</td>
<td>10%</td>
<td>16%</td>
<td>25%</td>
<td>41%</td>
<td>46%</td>
</tr>
</tbody>
</table>

**Note:** Table shows data for 2010-12 CPS graduates. Percentages may not total to 100 percent due to rounding.
Appendix C
Data Notes

For the purposes of this analysis, students are cohorted according to the year they graduated from CPS, regardless of how many years they spent in high school. GPAs are a weighted average of students’ course grades. They are weighted by number of credits, but not by course level. Many CPS charter schools use different student information systems from the IMPACT system used by non-charter schools. Because each system varies in the way that it stores information about courses, credits, teachers, periods, grades, and other data, creating linkages across systems is difficult, and our data archive currently does not include records of charter school students’ course performance. Charter students are therefore not included in the GPA breakdowns.

Information on student demographics and high school graduation is from CPS administrative records, which are shared with the UChicago Consortium through its Master Research Services agreement with the district. Data from the National Student Clearinghouse (NSC) are used for all college enrollment, persistence, and completion rates. The NSC houses records on enrollment and post-secondary credentials for colleges throughout the United States and covers 98 percent of all post-secondary enrollments nationally. However, some students’ enrollment or completion records may not be included in the NSC data, for various reasons including enrolling in an institution that does not report to the National Student Clearinghouse, requesting a FERPA block on one’s records to prevent them from being reported to the National Student Clearinghouse, or being incorrectly matched by the National Student Clearinghouse algorithm. Additionally, some institutions do not report college records for undocumented students.

While NSC data has imperfect information on the types of degrees students are completing, the UChicago Consortium and the To&Through Project recently completed a project in which we examined the NSC data more closely and compared it to a secondary data set shared by the Illinois Community College Board, which collects data on students enrolled at community colleges in Illinois. We found that the majority of degrees completed by CPS students at two-year colleges in Illinois that were uncategorizable using the NSC data were in fact associate degrees. Knowing that the vast majority (94 percent) of CPS students who attend two-year colleges do so in Illinois, this finding gives us confidence to assume that most two-year college completions we see in the NSC data represent associate degrees, and that two-year college completion is a valid measure of students’ attaining a credential of economic value.

22 Nagaoka & Mahaffie (2020).
ABOUT THE AUTHORS

JENNY NAGAOKA is the Deputy Director of the UChicago Consortium, where she has conducted research for over 20 years. Her research interests focus on policy and practice in urban education reform, particularly using data to connect research and practice and examine school environments and instructional practices that promote college readiness and success. She has co-authored numerous journal articles and reports, including studies of college readiness, noncognitive factors, the transition from high school to post-secondary education, and authentic intellectual instruction. She is the senior advisor to the To&Through Project, a project that provides educators, policymakers, and families with research, data, and training on the milestones that matter most for college success. Jenny is the lead author of Foundations for Young Adult Success: A Developmental Framework (2015), which draws on research and practice evidence to build a coherent framework of the foundational factors for young adult success and investigate their development from early childhood through young adulthood and how they can be supported through developmental experiences and relationships. Jenny received her BA from Macalester College and her master’s degree in public policy from the Irving B. Harris School of Public Policy at the University of Chicago.

JEE SUN LEE is currently a graduate research assistant at the Houston Education Research Consortium (HERC) and was formerly a Research Analyst with the To&Through Project and the UChicago Consortium. While at To&Through, she supported descriptive research as well as other data projects. Within the UChicago Consortium, she worked with the Equitable Learning and Development Project (ELDP) and on projects related to the City Colleges partnership. Jasmin holds a BA in public policy from the University of Chicago and is currently pursuing a PhD in Sociology at Rice University. Her research interests broadly include studying structures within and outside of mainstream education that facilitate and/or inhibit educational equity.

ALEXANDRA USHER is an Associate Director of the To&Through Project and a Senior Research Analyst at the UChicago Consortium, where she leads the research and data processes that inform the To&Through Project. Alexandra most recently led data strategy for the AUSSL network of schools, and prior to that spent time at Chicago Public Schools and the Center on Education Policy. She holds a BA in international affairs from the George Washington University and an MPP from the University of Chicago Harris School.

ALEX SEESKIN leads the To&Through Project, which aims to significantly increase high school and post-secondary completion for under-resourced students of color in Chicago and around the country, by providing education stakeholders with research-based data on students’ educational experiences and facilitating dialogue on its implications for adult practice. Previously, he served as the Director of Strategy of the UChicago Charter School, and as a Resident at UChicago Impact. Prior to coming to UEI, Alex taught high school English in Chicago Public Schools for seven years, serving as the English Department Chair at Lake View High School from 2008–12. He earned a BS in communications from Northwestern University and an EdLD from the Harvard Graduate School of Education.

The To&Through Project

In collaboration with educators, policymakers, and communities, the To&Through Project aims to significantly increase high school and post-secondary completion for under-resourced students of color in Chicago and around the country by providing education stakeholders with research-based data on students’ educational experiences and facilitating dialogue on its implications for adult practice. At the To&Through Project, we:

- Conduct research and publish data on what matters for the attainment of Chicago Public Schools students (in collaboration with the University of Chicago Consortium on School Research).
- Design data tools and resources for education stakeholders that make data meaningful and actionable, including the publicly available To&Through Online Tool.
- Foster conversations about what matters most for students’ high school and post-secondary success.
- Facilitate a network of middle grades educators committed to building more equitable and supportive educational environments that promote the success of middle grades students in high school and beyond.

The To&Through Project is located at the University of Chicago’s Urban Education Institute in the Crown Family School of Social Work, Policy, and Practice.

This report reflects the interpretation of the authors. Although the UChicago Consortium’s Steering Committee provided technical advice, no formal endorsement by these individuals, organizations, the full Consortium, or the To&Through Project, should be assumed.
Steering Committee

PAIGE PONDER
Co-Chair
One Million Degrees

JOHN ZIEGLER
Co-Chair
DePaul University

Institutional Members

SARAH DICKSON
Chicago Public Schools

BRENDA DIXON
Illinois State Board of Education

BOGDANA CHKUMBOVA
Chicago Public Schools

TROY LARAVIERE
Chicago Principals and Administrators Association

JESSE SHARKEY
Chicago Teachers Union

MAURICE SWINNEY
Chicago Public Schools

Individual Members

NANCY CHAVEZ
OneGoal

JAHMAL COLE
My Block, My Hood, My City

ACASIA WILSON FEINBERG
The Cleveland Avenue Foundation for Education

VERNEE GREEN
Mikva Challenge

MEGAN HOUGARD
Chicago Public Schools

GREG JONES
The Academy Group

PRANAV KOTHARI
Revolution Impact, LLC

AMANDA LEWIS
University of Illinois at Chicago

RITO MARTINEZ
Rito Martinez Consulting LLC

SHAZIA MILLER
NORC at the University of Chicago

CRISTINA PACIONE-ZAYAS
Erikson Institute

KAFI MORAGNE-PATTERSON
UChicago Office of Civic Engagement

LES PLEWA
William H. Taft High School

CRISTINA SALGADO
City Bureau

ELLEN SCHUMER
COFI

REBECCA VONDERLACK-NAVARRO
Latino Policy Forum

PAM WITMER
Golden Apple Foundation
OUR MISSION With the goal of supporting stronger and more equitable educational outcomes for students, the UChicago Consortium conducts research of high technical quality that informs and assesses policy and practice in the Chicago Public Schools. We seek to expand communication among researchers, policymakers, practitioners, families, and communities as we support the search for solutions to the challenge of transforming schools. We encourage the use of research in policy action and practice but do not advocate for particular policies or programs. Rather, we help to build capacity for systemic school improvement by identifying what matters most for student success, creating critical indicators to chart progress, and conducting theory-driven evaluation to identify how programs and policies are working.