



OCTOBER 2018 | RESEARCH BRIEF

The Educational Attainment of Chicago Public Schools Students: 2017

UCHICAGO Consortium
on School Research



Jenny Nagaoka and Alex Seeskin

Table of Contents

1	Introduction: Attainment Rates
6	Freshman OnTrack
7	High School Graduation
8	College Enrollment
9	Two-Year Persistence in Four-Year Colleges
10	Four-Year College Graduation
11	Interpretive Summary
13	References
14	Appendix A
16	Appendix B
19	Authors
20	Acknowledgements

Cite as:

Nagaoka, J., & Seeskin, A. (2018). *The educational attainment of Chicago Public Schools students: 2017*. Chicago, IL: University of Chicago Consortium on School Research.

This report reflects the interpretation of the authors. Although the UChicago Consortium's Steering Committee provided technical advice, no formal endorsement by these individuals or organizations, nor the full Consortium or the To&Through Project, should be assumed.

In the United States, a student’s educational attainment is associated with nearly every social outcome we care about: income, employment, life-expectancy, and more.¹ For this reason, it is important to understand how students in Chicago Public Schools (CPS) perform on key milestones of educational attainment, including high school graduation, college enrollment, and college graduation. This annual analysis of CPS students’ attainment milestones gives Chicago’s education stakeholders a high-level view of how the district performed on these education milestones in 2017, compared to rates from the past decade.²

This report is framed around the Bachelor’s Degree Attainment Index (DAI), an estimate of how many of today’s ninth-graders will earn a bachelor’s degree within 10 years. The analysis looks at the district’s progress on the three milestones that comprise the Bachelor’s Degree Attainment Index (Bachelor’s DAI)—high school graduation, college enrollment, and four-year college graduation—and also shows the progress for students by race/ethnicity and gender on these milestones. This

report also looks at two additional indicators: Freshman OnTrack rates and two-year persistence rates in four-year colleges. Like previous annual reports on the district’s educational attainment from the University of Chicago Consortium on School Research (UChicago Consortium) and the To&Through Project, this report is not meant to present new research findings on how policies or practices are impacting students.

¹ Trostel & Chase Smith (2015).

² This report only looks at district rates on milestones. Readers who would like more data on the rates for individual high schools can visit toandthrough.uchicago.edu/tool.

Background on the Degree Attainment Indices

The UChicago Consortium has developed two methods to estimate students' progression to and through high school and four-year college (see Figure A): The Direct Bachelor's Degree Attainment Index (Direct Bachelor's DAI) and the Bachelor's DAI. The Direct Bachelor's DAI estimates the percentage of students who will attain a bachelor's degree through a direct path over the course of 10 years: by graduating high school in four years, enrolling immediately in a four-year college, and earning a bachelor's degree within six years of graduating from high school. It only includes students who take a direct path from high school to college by making an immediate transition to a four-year college.

The Bachelor's DAI provides a better estimate of the total proportion of CPS ninth-graders who will earn a bachelor's degree within 10 years of beginning high school because, unlike the Direct Bachelor's DAI, it encompasses all students who earn a bachelor's degree, not just those who enroll in a

four-year college immediately after high school. It accounts for the different pathways students take to earning a bachelor's degree within six years of graduating from high school. It includes students who first enroll in a two-year college, students who delay entry into college, and students who enroll immediately in a four-year college. Both the Direct Bachelor's DAI and the Bachelor's DAI are calculated using the most recent rates available for each milestone (high school graduation, college enrollment, and four-year college graduation rates).

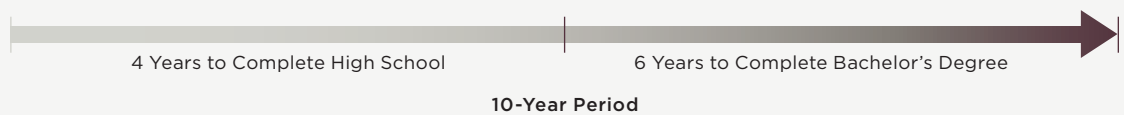
In the future, we intend to calculate a Community College Attainment Index for CPS that will focus on two-year college certificates and degrees. We have not calculated this index because the National Student Clearinghouse data, which we use to determine college enrollment and completion, has incomplete information on certificate and associate's degree completion. To fill this gap, we are examining alternative data sources on two-year college completion for CPS graduates.

FIGURE A

Direct Bachelor's DAI



Bachelor's DAI

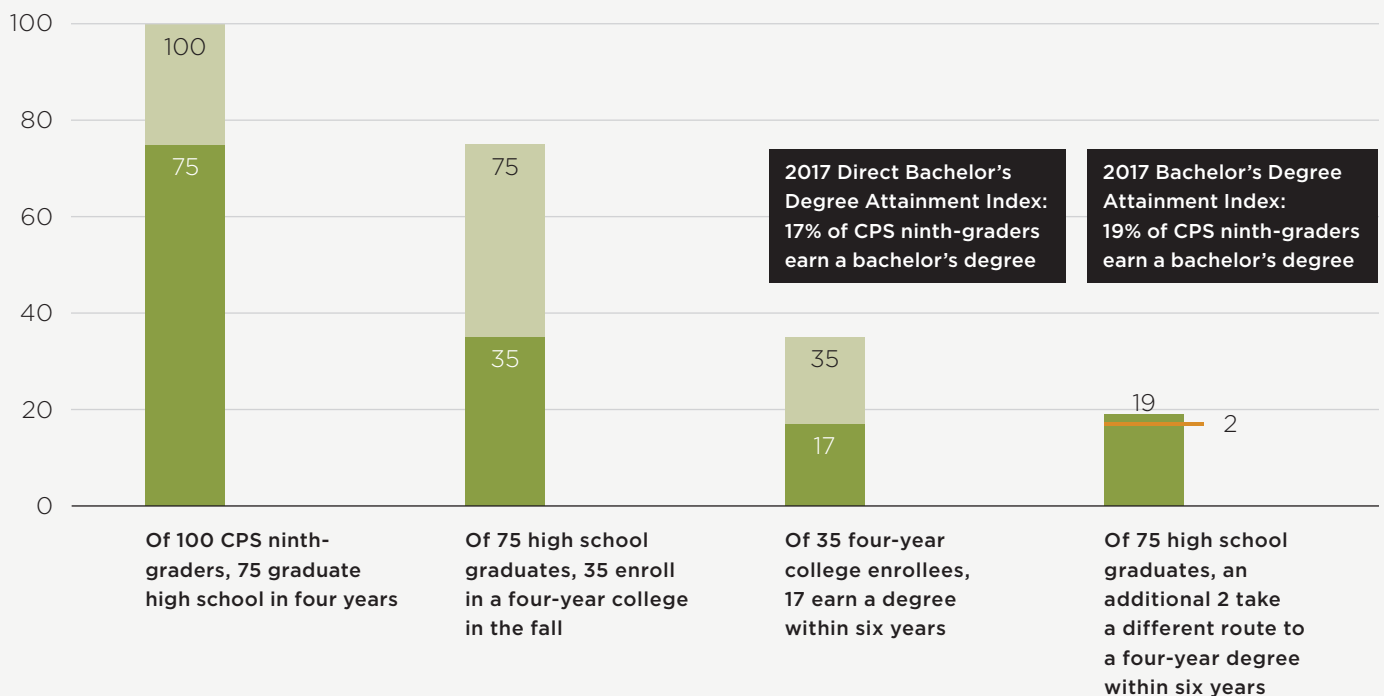


Direct Bachelor's Degree Attainment Index

Based on the most recent high school graduation rates, college enrollment rates, and college graduation rates for CPS students, we estimate that the Direct Bachelor's DAI for 2017 CPS ninth-graders is 17 percent (see Figure 1). **The 2017 Direct Bachelor's DAI is calculated by multiplying the 2017 high school graduation rate (75 percent) by the 2016 four-year college enrollment rate (47 percent) by the 2016 four-year college graduation rate (49 percent).** The 2017 high school graduation rate is the

percentage of CPS ninth-graders who started high school in 2013-14 and earned a diploma in four years, adjusted for transfers in and out of CPS. The 2016 four-year college enrollment rate is the percentage of 2016 CPS graduates who enrolled directly in a four-year college in the fall, following high school graduation. The 2016 four-year college graduation rate is the percentage of 2010 CPS graduates who enrolled directly in a four-year college and earned a bachelor's degree within six years. Over the past decade, CPS's Direct Bachelor's DAI has gone from 9 percent to 17 percent, and from 10 percentage points below the nation's rate to 6 percentage points below (see Table 1).

FIGURE 1
2017 Bachelor's Degree Attainment Indices



Note: Data and methods are described in Appendices A and B.

TABLE 1
Key Milestones and Degree Attainment Indices*

	HS Graduation		4-Year College Enrollment (Year of HS graduation)		4-year College Graduation (Year of college graduation)		Direct Bachelor's DAI		Bachelor's DAI	
	2006	2017	2006	2016	2006	2016	2006	2017	2006	2017
CPS	57%	75%	33%	47%	46%	49%	9%	17%	11%	19%
Nation	79%	84%	41%	46%	59%	60%	19%	23%	—**	—**

Note: The most recent data available for each rate are shown. The high school graduation rate for the nation is from 2016. Methods are described in Appendix B.

* We use the most recent data available to calculate the 2017 Bachelor's and Direct Bachelor's DAI. 2016 is the most recent year for which we have college enrollment and graduation data from the National Student Clearinghouse. The 2006 rate is based on rates that would have been available in 2006; that is, the 2006 high school graduation rate, the four-year college enrollment rate for 2006 graduates, and the four-year college graduation rate for students who graduated from high school in 2000 and completed college by 2006.

** We are unable to calculate a Bachelor's DAI for the nation because we lack numbers about the four-year degree attainment rate for students who make an immediate transition to a two-year college and who delay entry to college.

Bachelor's Degree Attainment Index

We estimate that an additional 2 percent of 2017 CPS ninth-graders will earn a bachelor's degree within six years of high school graduation by taking an indirect path (by enrolling directly in a two-year college or not enrolling directly in any college). Thus, the 2017 Bachelor's DAI is 19 percent, up from 11 percent in 2006 and from 18 percent in 2016. The increase over the past year was primarily due to the 3-percentage-point improvement in the four-year college enrollment rate (as shown in the four-year college enrollment trend in Figure 4).

Attainment by Race/Ethnicity and Gender

Looking at the Bachelor's DAI by students' race/ethnicity and gender, the extent to which the rates vary is readily apparent (see Table 2). In particular, we estimate that Black and Latino young men will be less likely to graduate with a bachelor's degree than the average CPS ninth-grader; if the underlying rates don't change, we predict that 10 percent of Black young men and 13 percent of Latino young men who were ninth-graders in 2017 will have a bachelor's degree in 10 years, compared to the district average of 19 percent. In addition, in each racial group, young

TABLE 2

Key Milestones and Degree Attainment Indices by Race/Ethnicity and Gender*

	Number of First-Time Ninth-Graders in 2017	2017 HS Graduation (Among 2014 First-Time Ninth-Graders)	2016 4-Year College Enrollment (Among 2016 HS Graduates)	2016 4-Year College Graduation (Among 2010 4-Year Enrollees)	Direct Bachelor's DAI	Bachelor's DAI
All Students	26,817	75% x	47% x	49% =	17%	19%
Black Young Women	5,149	72% x	53% x	41% =	16%	17%
Black Young Men	5,016	61% x	44% x	32% =	9%	10%
Latina Young Women	6,282	82% x	45% x	55% =	20%	23%
Latino Young Men	6,317	75% x	34% x	44% =	11%	13%
White Young Women	1,171	89% x	69% x	79% =	48%	53%
White Young Men	1,164	82% x	54% x	66% =	29%	34%
Asian Young Women	500	95% x	71% x	79% =	54%	59%
Asian Young Men	615	90% x	66% x	70% =	42%	46%

Note: *We include race/ethnicity categories with enough students to generate a reliable trend over time for these metrics, so some categories (i.e. Native American, Alaskan Native, Pacific Islander/Hawaiian, Multiracial) are not represented here.

men are less likely to graduate with a bachelor's degree than their female peers: Black young women are 9 percentage points and Latina young women are 10 percentage points more likely to earn a bachelor's degree in 10 years than their male peers.

Differences in the milestones that make up the Bachelor's DAI point to how the milestone where students need support differs by race/ethnicity and gender. For example, Latino young men graduate from high school at the average rate for CPS students (75 percent), but they are 13 percentage points behind the average district rate for four-year college enrollment. In contrast, Black young men enroll in four-year colleges at near the average district rate, but are 14 percentage points behind the district's high school graduation rate.

Trends over Time in Educational Attainment Milestones

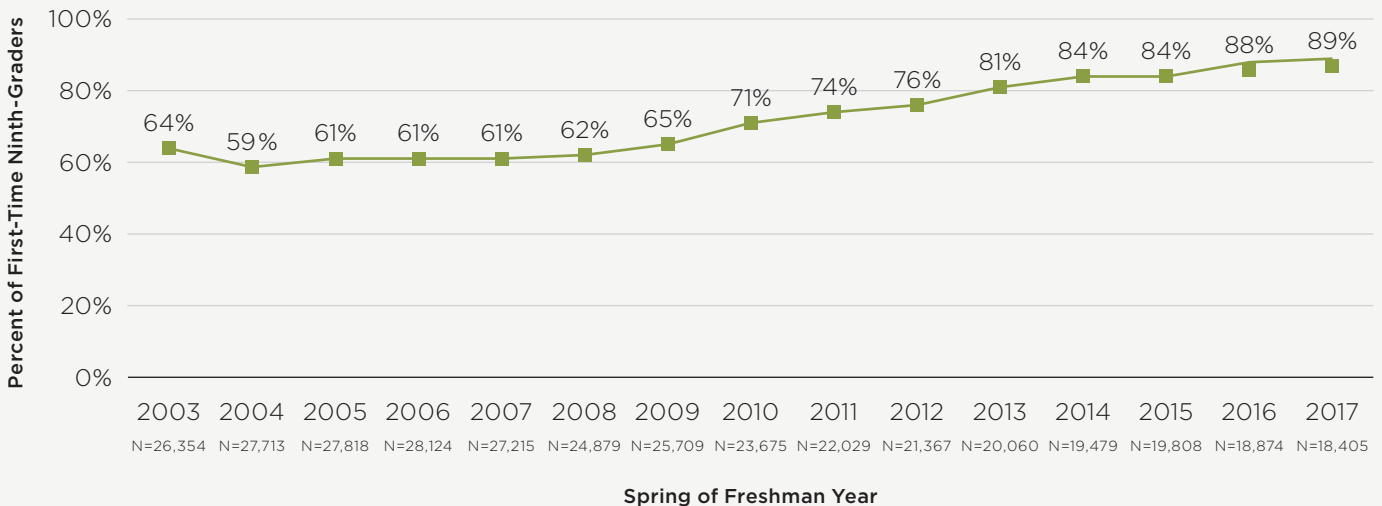
In order to better understand the changes that underlie the improvements in Chicago's Bachelor's DAI over the past 10 years, in the remainder of the report, we look at trends for the three milestones that constitute the index: high school graduation, two-year and four-year enrollment, and four-year college graduation. We also look at Freshman OnTrack and two-year persistence in four-year colleges, which though not formally part of the index, act as important predictive indicators of subsequent high school and college graduation rates. Appendix A provides tables of these figures with Ns and percentages over time.

Freshman OnTrack

The Freshman OnTrack rate is highly predictive of high school graduation and has been used by CPS for the past 15 years to guide schools' work with ninth-graders.³ Although it does not perfectly predict future graduation rates, the Freshman OnTrack rate provides an indication of the direction of future high school graduation trends. In order to be considered "on track" in CPS, a ninth-grader needs to fail no more than one semester of a core class and earn at least the five credits needed to be promoted to tenth grade.

The students who were first-time ninth-graders in the spring of 2017 had an average Freshman OnTrack rate of 89 percent (see Figure 2). This represents an improvement of 25 percentage points compared to ninth-graders in the spring of 2003 (graduating cohort of 2006). Due to data availability issues, the Freshman OnTrack rate does not include ninth-graders who attended charter schools; all other numbers in this brief include charter school students.⁴ Compared to 2003, charter school students represent a growing proportion of CPS ninth-graders.⁵

FIGURE 2
Freshman OnTrack Rates Have Risen Nearly 30 Percentage Points in the Last Decade



Note: Ns listed above refer to the number of the first-time ninth-graders for each year for students with course grade data. Course grades for charter school students are not available. Ns and percentages do not include charter school graduates or students missing course grade information. See Appendix A, Table A.1 for details on the Ns and percentages. Methods used to calculate Freshman OnTrack rates are described in Appendix B.

³ Allensworth (2013); Allensworth & Easton (2005).

⁴ 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. We are therefore unable to calculate a Freshman OnTrack rate for these students.

⁵ Gwynne & Moore (2017).

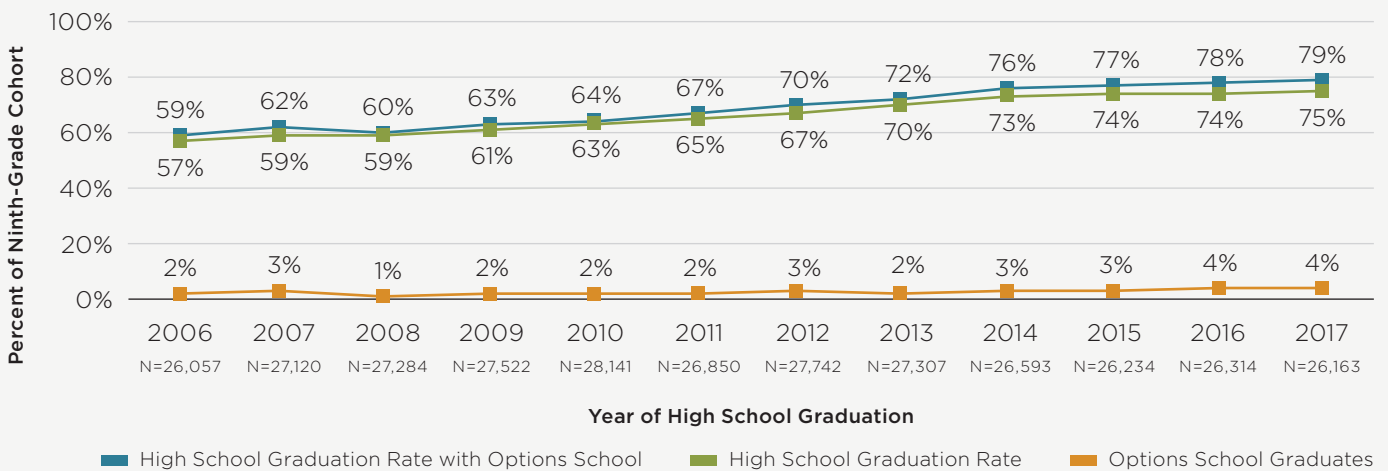
High School Graduation

The high school graduation rate for CPS students has risen steadily over the past decade, from 57 percent in 2006 to 75 percent in 2017 (see Figure 3). With roughly the same number of students in the ninth-grade cohort in both years (approximately 26,000), the class of 2017 had more than 4,700 more graduates (19,581 graduates) than the class of 2006 (14,834 graduates). The high school graduation rate used by the UChicago Consortium and the To&Through Project is the percentage of first-time ninth-graders who graduated in four years and did not attend an options school (i.e., alternative school).⁶ Students who transfer into CPS high schools are included with their corresponding ninth-grade cohort; see Appendix B for details.

Unlike the UChicago Consortium and the To&Through Project, CPS includes students who graduate from

options schools in the calculation of their high school graduation rate.⁷ Over the past several years, CPS has expanded its options high school programs in order to provide more opportunities for students who have been expelled or are significantly behind on credits to complete high school. Options schools support students through accelerated credit-recovery, flexible scheduling, and more intensive counseling. As the number of options schools has grown, the number of CPS students graduating from options schools has increased, and we provide these rates as well to reflect this change in CPS strategy. In 2017, 4 percent of CPS first-time ninth-graders graduated in four years from an options school (though most began at a traditional high school), which means that the high school graduation rate, plus the options school graduation rate, was 79 percent.

FIGURE 3
High School Graduation Rates Gave Increased Considerably over the Past Decade



Note: The DAI indices use the high school graduation rate without options schools. Ns listed above refer to the number of students in an adjusted, ninth-grade cohort for each graduation year. Details on percentages and Ns are available in Appendix A, Table A.2. Methods used to calculate high school graduation rates are described in Appendix B.

⁶ Allensworth, Healey, Gwynne, & Crespino (2016).

⁷ One other important note on the methods used to calculate high school graduation rates is that, while CPS only excludes students with verified transfers from its rate, the UChicago Consortium and the To&Through Project exclude all students who transfer out of CPS.

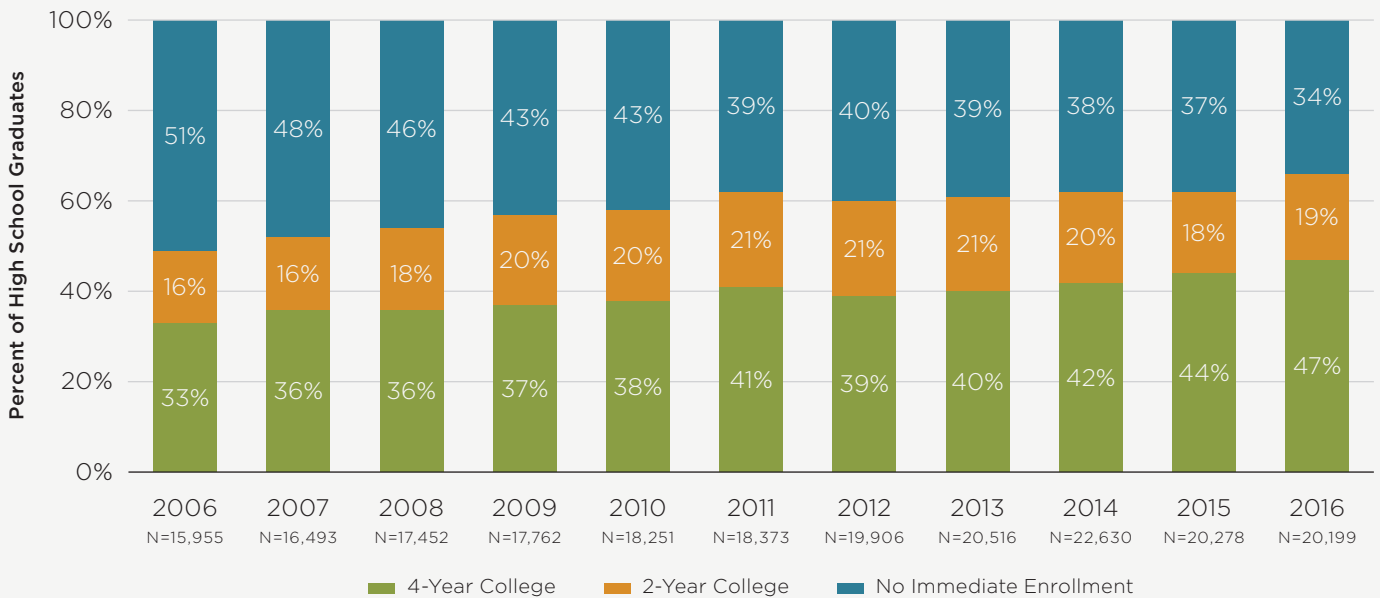
College Enrollment

The two-year and four-year college enrollment rate is the percentage of CPS graduates who enroll directly in college in the fall following their high school graduation. Even with an increasing number of high school graduates, the college enrollment rate of CPS high school graduates continued to rise in 2017, with most of the improvement coming in four-year college enrollment. In 2016, nearly half (47 percent) of CPS graduates enrolled directly in a four-year college, while 20 percent enrolled directly in a two-year college (see Figure 4). As noted in a 2017 Consortium report,⁸ nearly 20 percent of CPS students delay

entry to college, mostly students who eventually enroll in a two-year college. The college enrollment rates in Figure 4 do not include these students.

With increases in both the number of CPS graduates and the percentage of those graduates who directly enrolled in college, nearly 5,500 more CPS students enrolled directly in college in 2016 (13,301 two-year and four-year enrollees; see Table A.3 in Appendix A) than in 2006 (7,888 two-year and four-year enrollees), even as the district's overall high school enrollment remained relatively stable.⁹

FIGURE 4
Nearly Half of CPS Graduates Now Enroll Directly in a Four-year College



Note: Ns listed above refer to the number of the high school graduates for each year. Details on Ns and percentages are available in Appendix A, Table A.3. Methods used to calculate college enrollment rates are described in Appendix B.

⁸ Coca, Nagaoka, & Seeskin (2017).

⁹ Allensworth et al. (2016).

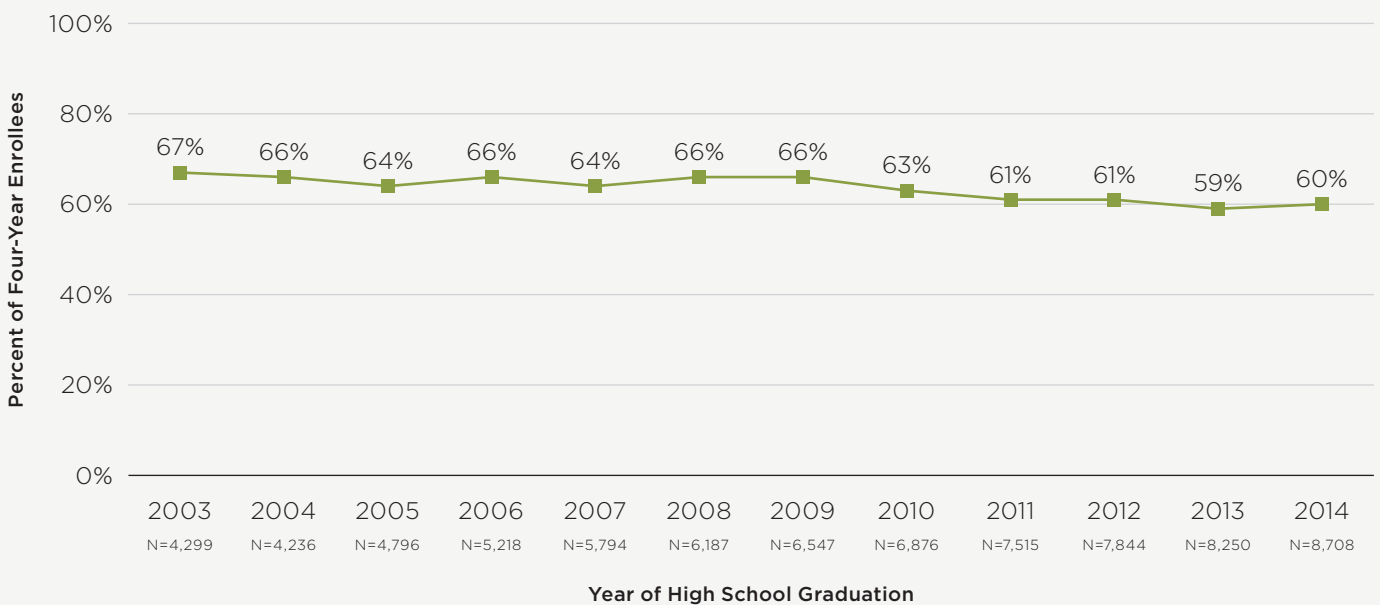
Two-Year Persistence in Four-Year Colleges

The two-year persistence rate in four-year colleges is the percentage of CPS high school graduates who immediately enrolled in a four-year college and are continuously enrolled in a four-year college for four semesters. Currently, the two-year persistence rate is the best indicator we have of college graduation, but it is not perfect: there are students who persist for two years and then stop out or drop out for various reasons, including financial and academic difficulties. Other students stop out, but ultimately graduate. Of the 8,708 CPS 2014 graduates who

enrolled directly in a four-year college, 60 percent were continuously enrolled in a four-year college for four semesters (see Figure 5).

Although the persistence rate has declined over the past five years from 66 percent to 60 percent, the 2014 rate was 1 percentage point higher than the 2013 rate. Moreover, with more and more college enrollees each year, the total number of CPS students who persisted for two years in four-year colleges improved to 5,206 from 4,325 in 2009.

FIGURE 5
As the Number of Four-Year College Enrollees Doubled, the Rate of Two-Year Persistence in Four-Year College has Dipped Slightly



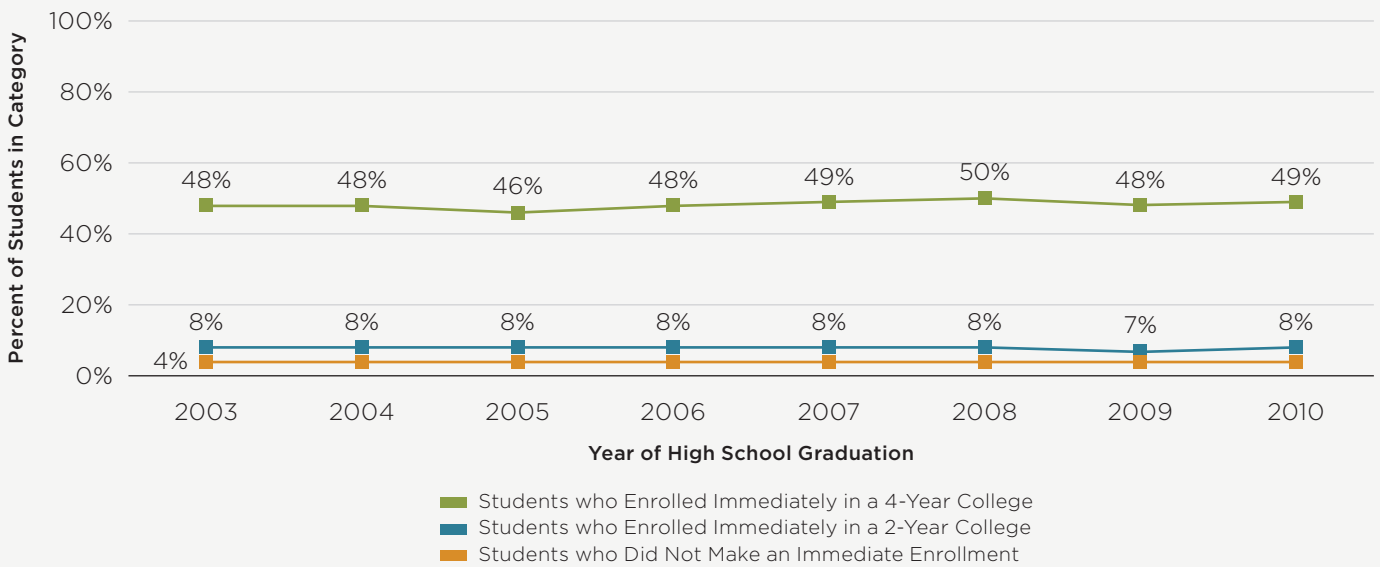
Note: Ns listed above refer to the number of four-year college enrollees for each year. Details on the data are available in Appendix A, Table A.4. Details on methods used to calculate two-year persistence rates are described in Appendix B.

Four-Year College Graduation

The four-year college graduation rate for CPS high school graduates who made an immediate transition to a four-year college and graduated with a bachelor's degree within six years continued to remain relatively flat, at about 49 percent (see Figure 6). The four-year graduation rates of CPS high school graduates who took indirect paths also remained flat. For graduates who enrolled directly in a two-year college, 8 percent graduated with a bachelor's degree in six years; for graduates who

did not enroll directly in any college, 4 percent earned a degree. Despite the flat rate, considerably more CPS students earned a bachelor's degree in 2016 than in 2003 because of the increases in the number of high school graduates and four-year college enrollees. In total, 1,200 more students from the high school graduating class of 2010 earned degrees (3,984 total students) than the class of 2003 (2,749 total students).

FIGURE 6
Four-Year College Graduation Rates Have Remained Flat for all CPS Graduates



Note: Details on Ns for each of the three groups and percentages are available in Appendix A, Table A.5. Methods used to calculate four-year college graduation rates are described in Appendix B.

Interpretive Summary

Over the past year, CPS has been recognized around the country for its improvement.¹⁰ As this report shows, there is good reason for that optimism: the improvements in Freshman OnTrack, high school graduation, and four-year college enrollment all present a picture of a district that has been deeply committed to the educational attainment of its students.

The district's improvement also points to the importance of small year-to-year increases in key milestones. Although this slow-but-steady growth may not appear transformational in any given year, over the course of a decade, these small improvements have yielded significantly more CPS students reaching critical milestones. In particular, increases in both the high school graduation rate and the college enrollment rate mean that approximately 5,000 more students are enrolling directly in college today than did 10 years ago.

However, two trends in particular should be investigated further. First, as options schools produce an increasing share of the district's high school graduates, there are emerging questions about whether they should be included in the district's overall high school graduation rate and if options schools are providing more students the opportunity to complete high school or if they are graduating students who would have completed at a traditional high school anyway. In order to make this determination, there is a lot more we need to understand about the experience in options schools and how options schools graduates' high school completion rates, and post-secondary and career outcomes, compare to students with similar academic qualifications who remain with their traditional high school.

Second, the declines in two-year persistence in four-year colleges over the past several years raise important concerns about what is happening to recent four-year college enrollees and whether this means that college graduation rates may also start to decline. We need to learn a lot more about the transition from high school to college, including the academic, social, financial, college, and contextual factors that shape whether students leave college, temporarily or permanently. In particular, we need to know more about how high schools, colleges, families, communities, employers, and others can better support students to college completion without stopping out. However, the decline in the persistence rate began with the class of 2010 and did not translate to a corresponding decrease in college graduation (the college graduation rate actually improved between the classes of 2009 and 2010). This difference is a sign that we need more research about the relationship between persistence and college graduation.

Increases in both the high school graduation rate and the college enrollment rate mean that approximately 5,000 more students are enrolling directly in college today than did 10 years ago.

¹⁰ See, for example: Brooks (2018, March 12); Chenoweth (2017, December 19); Cunningham (2018, January 17); Strauss (2018, February 9).

Finally, the Bachelor's DAI suggests that many current Latino and Black ninth-graders, particularly young men, will not meet their educational aspirations, nor receive the positive social outcomes associated with college completion. A closer look at the patterns suggests different mechanisms for improving students' likelihood of completing a bachelor's degree for different groups of students. For example, Latino young men have a high school graduation rate that matches the district average (75 percent) but have a lower rate of four-year college enrollment (34 percent versus 47 percent). Black young men on the other hand, have much lower high school graduation rates than the district average (61 percent vs. 75 percent) but a four-year college enrollment rate close to the district average (44 percent vs. 47 percent). This suggests supporting different strategies for each group of students, such as assisting with application to college and

enrollment for Latino young men, while changing practices and deepening supports and interventions for Black young men around high school graduation. It also means that as an education community, we—educators, policymakers, and researchers—must critically examine the biases we bring to the work and the ways these lenses may be reinforcing systematic barriers for young men of color in Chicago.

CPS has made great strides around educational attainment over the past 10 years. However, those strides have not happened evenly across gender and race/ethnicity. For students, regardless of their gender or race/ethnicity, to be able to meet their educational aspirations, CPS cannot do it alone; the district will need to continue building and deepening partnerships with non-profits, higher education institutions, and parents and communities across the city.

References

- Allensworth, E. (2013). The use of ninth-grade early warning indicators to improve Chicago schools. *Journal of Education for Students Placed at Risk (JESPAR)*, 18(1), 68-83.
- Allensworth, E., & Easton, J.Q. (2005). *The on-track indicator as a predictor of high school graduation*. Chicago, IL: University of Chicago Consortium on Chicago School Research.
- Allensworth, E.M., Healey, K., Gwynne, J.A., & Crespin, R. (2016). *High school graduation rates through two decades of district change: The influence of policies, data records, and demographic shifts*. Chicago, IL: University of Chicago Consortium on School Research.
- Brooks, D. (2018, March 12). Good leaders make good schools. *New York Times*. Retrieved from <https://www.nytimes.com/2018/03/12/opinion/good-leaders-schools.html>
- Chenoweth, K. (2017, December 19). The work of a generation. *Huffington Post*. Retrieved from https://www.huffingtonpost.com/entry/the-work-of-a-generation_us_5a2707ece4b0f3c1632e6178
- Coca, V.M., Nagaoka, J. & Seeskin, A. (2017). *Patterns of two-year and four-year college enrollment among Chicago Public Schools graduates*. Chicago, IL: University of Chicago Consortium on School Research.
- Cunningham, P. (2018, January 17). Cunningham: What's driving Chicago's school turnaround success? Lessons from 30 years of ed reform. *The 74 Million*. Retrieved from <https://www.the74million.org/article/cunningham-whats-driving-chicagos-school-turnaround-success-lessons-from-30-years-of-ed-reform>
- Gwynne, J.A., & Moore, P.T. (2017). *Chicago's charter high schools: Organizational features, enrollment, school transfers, and student performance*. Chicago, IL: University of Chicago Consortium on School Research.
- Strauss, V. (2018, February 9). To learn about improving urban public schools, we should study Chicago. Yes, Chicago. *Washington Post*. Retrieved from https://www.washingtonpost.com/news/answer-sheet/wp/2018/02/09/to-learn-about-improving-urban-public-schools-we-should-study-chicago-yes-chicago/?noredirect=on&utm_term=.db4b08dd3a39
- Trostel, P., & Chase Smith, M. (2015). *It's not just the money: The benefits of college education to individuals and to society*. Indianapolis, IN: Lumina Foundation.

Appendix A: Tables with Ns and Percentages for Key Milestones over Time

TABLE A.1.
Freshman OnTrack

Freshman OnTrack (Spring of the Ninth-Grade Year)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of Total Ninth-Graders	30,482	32,233	32,257	32,554	32,690	31,153	32,517	31,531	30,415	29,351	28,807	28,520	27,310	26,718	25,655
Number of Total Ninth-Graders Who Were:															
On-Track	16,784	16,378	17,008	17,164	16,491	15,385	16,808	16,685	16,302	16,275	16,263	16,357	16,721	16,612	16,306
Off-Track	9,570	11,335	10,810	10,960	10,724	9,494	8,901	6,990	5,727	5,092	3,797	3,122	3,087	2,262	2,099
Missing On-Track Status	4,128	4,520	4,439	4,430	5,475	6,274	6,808	7,856	8,386	7,984	8,747	9,041	7,502	7,844	7,250
Percent of Total Ninth-Graders Who Were:															
On-Track	55%	51%	53%	53%	50%	49%	52%	53%	54%	55%	56%	57%	61%	62%	64%
Off-Track	31%	35%	34%	34%	33%	30%	27%	22%	19%	17%	13%	11%	11%	8%	8%
Missing On-Track Status	14%	14%	14%	14%	17%	20%	21%	25%	28%	27%	30%	32%	27%	29%	28%

Note: Students who were missing an on-track status are almost entirely charter school students. We do not have course grade data on charter school students. See Appendix B for more detail.

TABLE A.2.
High School Graduation

High School Graduation (Year of Graduation)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of Students in Ninth-Grade Cohort	26,057	27,120	27,284	27,521	28,141	26,850	27,742	27,307	26,593	26,234	26,314	26,163
Number of Students in Ninth-Grade Cohort Who:												
Graduated from CPS High School	14,834	15,966	16,068	16,767	17,301	17,328	18,585	19,145	19,413	19,353	19,394	19,581
Graduated through an Options School	488	779	381	492	614	582	684	622	675	807	1,081	1,135
Did Not Graduate	10,735	10,375	10,835	10,262	10,226	8,940	8,473	7,540	6,505	6,074	5,839	5,447
Number of Students in Ninth-Grade Cohort Who:												
Graduated from CPS High School	57%	59%	59%	61%	62%	65%	67%	70%	73%	74%	74%	75%
Graduated through an Options School	2%	3%	1%	2%	2%	2%	3%	2%	3%	3%	4%	4%
Did Not Graduate	41%	38%	40%	37%	36%	33%	31%	28%	25%	23%	22%	21%

Note: The number of graduates in Table A.2 include only students who graduated within four years of starting high school. Students who transferred to a CPS school after ninth grade are included in these numbers; students who transferred out of CPS are excluded.

TABLE A.3.
College Enrollment

College Enrollment (Year of High School Graduation)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of HS Graduates	16,267	16,766	17,608	17,762	18,251	18,373	19,906	20,516	20,630	20,278	20,199
Number of HS Graduates Who:											
Did Not Enroll	8,362	8,186	8,150	7,692	7,764	7,087	7,988	7,919	7,727	7,591	6,898
2-year	2,590	2,679	3,178	3,523	3,611	3,771	4,074	4,347	4,195	3,738	3,835
4-year	5,315	5,901	6,280	6,547	6,876	7,515	7,844	8,250	8,708	8,949	9,466
Percent of Total Immediate Enrollees											
2-year	33%	31%	34%	35%	34%	33%	34%	35%	33%	29%	29%
4-year	67%	69%	66%	65%	66%	67%	66%	65%	67%	71%	71%

Note: The number of high school graduates in Table A.3 includes all students who graduated with a regular diploma from a CPS high school in the graduation year, including students who took longer than four years to graduate, and so do not match the numbers in Table A.2.

TABLE A.4.
2-Year College Persistence in Four-Year Colleges

College Persistence (Year of High School Graduation)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Number of 4-Year Enrollees	4,605	4,493	4,986	5,315	5,901	6,280	6,547	6,876	7,515	7,844	8,250	8,708
Number of 4-Year Enrollees Who:												
Persisted	3,097	2,971	3,205	3,535	3,798	4,128	4,325	4,308	4,611	4,810	4,891	5,206
Did Not Persist	1,508	1,522	1,781	1,780	2,103	2,152	2,222	2,568	2,904	3,034	3,359	3,502
Percent of 4-year Enrollees Who:												
Persisted	67%	66%	64%	66%	64%	66%	66%	63%	61%	61%	59%	60%
Did Not Persist	33%	34%	36%	34%	36%	34%	34%	37%	39%	39%	41%	40%

TABLE A.5.
Four-Year College Graduation Rates

College Graduation Rates (Year of High School Graduation)	2003	2004	2005	2006	2007	2008	2009	2010
Number of High School Graduates Who:								
Enrolled Immediately in a 4-Year College...	4,605	4,493	4,986	5,315	5,901	6,280	6,547	6,876
...and Graduated from a 4-Year College	2,206	2,014	2,284	2,574	2,877	3,115	3,162	3,373
Percent of Immediate 4-Year Enrollees Who Graduated From a 4-Year College	48%	48%	46%	48%	49%	50%	48%	49%
Enrolled Immediately in a 2-Year College...	2,510	2,869	2,679	2,590	2,679	3,178	3,523	3,611
...and Graduated From a 4-Year College	190	217	208	207	215	266	259	287
Percent of Immediate 2-Year Enrollees Who Graduated From a 4-Year College	8%	8%	8%	8%	8%	8%	7%	8%
Did Not Immediately Enroll in College...	8,100	9,877	8,984	8,362	8,186	8,150	7,692	7,764
...and Graduated From a 4-Year College	353	384	345	317	305	298	321	324
Percent of Delayed Enrollees Who Graduated From a 4-Year College	4%	4%	4%	4%	4%	4%	4%	4%

Appendix B: Data Sources and Definitions

Data Sources

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. All data are available for charter school students, with the exception of course grades used to compute Freshman OnTrack rates. Data from the National Student Clearinghouse (NSC) are used for all college enrollment 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. All of these data are available for charter school graduates.

Data Definitions of Key Milestones and Degree Attainment Indices

Throughout this report, the year refers to the spring of the school year (e.g., 2017 refers to the 2016-17 school year).

Freshman OnTrack Rate

The Freshman OnTrack rate is the proportion of first-time ninth-graders who have earned five or more credits and have failed no more than one semester of a core course (English, math, science, and social studies) by the end of ninth grade. On-track status was not calculated for ninth-graders who were enrolled only for one semester during the year, and does not include summer coursework. Course grades for charter school students were not available. 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. Therefore, we were unable to calculate on-track rates for charter schools. Charter school students constituted 27 percent of first-time ninth-graders in the 2016-17 cohort.

High School Graduation

The four-year high school graduation rate is the proportion of students in an adjusted, first-time ninth-grade cohort who earned a regular high school diploma within four years, including the summer after their fourth year. Students were considered first-time ninth-graders if they had never before been enrolled in a CPS high school and if they either 1) were actively enrolled as a ninth-grader on the 20th day of the school year or, 2) enrolled as a ninth-grader after the 20th day of the school year and remained enrolled long enough to receive course grades.

Students who enrolled in a charter school after the 20th day are included in the first-time ninth-grade cohort, even though we do not know if they remained enrolled long enough to receive grades. High schools included programs CPS developed for students who had not passed the eighth-grade test benchmarks and were aged 15 or more (e.g., transition centers, academic preparatory centers, achievement academies). Students who transferred into CPS after ninth grade were included in the cohort that corresponds to their grade and are assigned to the first CPS high school they enrolled in. Ungraded special education students, students whose first CPS enrollment was at an options school, and students who permanently transferred out of CPS (whether the transfer was verified or not) were not included in first-time ninth-grade cohorts. Students who earned a diploma from an options (alternative) school or program were counted as non-graduates.

In recent years, CPS has increased the number of options schools and more students are enrolling. Options schools provide additional supports and services for students who have been out of school and seek to complete a high school diploma.

College Enrollment

The college enrollment rate is the proportion of high school graduates who enrolled in a post-secondary institution (which participates in the NSC) in the fall following high school graduation. High school graduates who enrolled in primarily baccalaureate degree-granting institutions were considered four-year enrollees; graduates who enrolled in institutions that primarily grant associate's degrees or certificates were considered two-year college enrollees. Off-cycle high school graduates were counted as graduates in the school year in which they graduated. High school graduates were not counted as college enrollees either if they enrolled in colleges that do not report enrollment data to the NSC, or if they requested that their college not share their data with the NSC. Individual high schools may have better data on their graduates' college enrollment. The NSC relies on a matching algorithm to pair data provided by CPS on their graduates with data provided by colleges. This algorithm may produce different results using data provided by schools, which may be more current than the data given by CPS. Additionally, high schools may have other evidence (e.g., course schedules or transcripts) of their graduates' college enrollment.

College Persistence

The college persistence rate is the proportion of four-year college enrollees who enrolled immediately after high school graduation and have been continuously enrolled in one or more four-year institutions for four semesters. Like with the college graduation rate, students who enrolled in a college that does not provide graduation records to the NSC in the fourth through sixth years after high school graduation were not included in persistence rates.

College Graduation Rate from Four-Year Colleges

The college graduation rate is the proportion of immediate four-year enrollees who earned a bachelor's degree from a four-year college within six years. Data on college graduation comes from the NSC. Students who earned a bachelor's degree from a different four-year college from where they first enrolled after high school were counted as four-year college graduates. Students who enrolled in a four-year college that does not provide graduation records to the NSC in the fourth through sixth years after high school graduation were not included in these rates, as we were unable to determine if they earned a bachelor's degree. We did not include graduation rates from two-year colleges because for many students, the NSC data does not indicate whether they completed a certificate or an associate's degree.

Direct Bachelor's Degree Attainment Index

The Direct Bachelor's Degree Attainment Index (Direct Bachelor's DAI) is the product of the most recent rates available for high school graduation, four-year college enrollment, and four-year college graduation. It provides an estimate of the percentage of ninth-graders who will take a straightforward route to a bachelor's degree within 10 years of beginning high school. The Direct Bachelor's Degree Attainment Index is not the rate at which any single cohort of CPS ninth-graders obtains a bachelor's degree; rather it uses the most recent numbers for the three milestones to give a picture of the current state of the district.

Bachelor's Degree Attainment Index

The Bachelor's Degree Attainment Index (Bachelor's DAI) provides a better estimate of the proportion of ninth-graders who will earn a bachelor's degree within 10 years of beginning high school because it accounts for students who take alternative routes to a bachelor's degree, either by delaying college entry or by first enrolling in a two-year college. While the Direct Bachelor's DAI only includes enrollment and graduation rates for four-year college enrollees, the Bachelor's DAI uses the enrollment and four-year college graduation rates for two additional groups of CPS graduates: those who initially enroll in a two-year college and those who delay college enrollment.

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 examining the 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 lead researcher on 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. Nagaoka 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 investigates their development from early childhood through young adulthood and how they can be supported through developmental experiences and relationships. Nagaoka 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.

ALEX SEESKIN is the Chief Strategy Officer at the Urban Education Institute where he is responsible for guiding strategy for the organization and leading high priority work across and within UEI's units. Seeskin also leads the To&Through Project (toandthrough.uchicago.edu), which aims to empower educators and families with research, data, and resources they need to move more students to and through high school and college. Previously, he served as the Director of Strategy of UChicago Charter, and as a resident at UChicago Impact. Prior to coming to UEI, Seeskin 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. Seeskin earned a BS in communications from Northwestern University and an EdLD from Harvard University.

Acknowledgements

The authors gratefully acknowledge the many people who contributed to this report. The content of this report was shaped by valuable contributions from Shelby Mahaffie, Elsa Mundt, and Michael Petruzelli, and feedback provided by the To&Through advisory group and other members of the Chicago education community. Consortium Steering Committee members Gina Caneva, Nancy Chavez, and Beatriz Ponce de León offered very thoughtful reviews as we finalized the narrative. We thank members of the UChicago Consortium's research review group, particularly Elaine Allensworth, Julia Gwynne, and Kylie Klein, as well as our external reviewers, Eliza Moeller and Mary Ann Pitcher, for their helpful feedback. The UChicago Consortium's communications team, including Bronwyn McDaniel, Jessica Tansey, Jessica Puller, and Alida Mitau, were instrumental in the production of this report. Kaleen Healey and Valerie Michelman were authors on the first version of this report and shaped its content. We also thank Melissa Roderick and the UChicago Consortium's post-secondary research team for providing the groundbreaking research base for this report.

This report was supported by the Crown Family Philanthropies. We thank them for their support and collaboration with this 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 Foundation, Chicago Community Trust, CME Group Foundation, Crown Family Philanthropies, Lloyd A. Fry Foundation, Joyce Foundation, Lewis-Sebring Family Foundation, McDougal Family Foundation, Osa Foundation, Polk Bros. Foundation, Robert McCormick Foundation, Spencer Foundation, Steans Family Foundation, and The Chicago Public Education Fund.

THE TO&THROUGH PROJECT is a partnership between the University of Chicago's Urban Education Institute and the Network for College Success. The Project's mission is to use research, data, and professional learning to help more students get to and through high school and college:

- Research that illuminates what matters most for students' high school and college success
- Data that guides efforts to improve students' attainment of key milestones
- Professional Learning that helps translate research and data into improved practice.

In collaboration with educators, policymakers, and communities, the To&Through Project aims to significantly increase the percentage of Chicago Public Schools freshmen who graduate from high school and go on to earn a college degree, and to share the learning from Chicago with education stakeholders across the country.

Directors

Elaine M. Allensworth
Lewis-Sebring Director

Camille A. Farrington
*Managing Director and Senior
Research Associate*

Holly Hart
Survey Director

Kylie Klein
Director of Research Operations

Bronwyn McDaniel
*Director of Outreach and
Communication*

Jenny Nagaoka
Deputy Director

Melissa Roderick
*Senior Director Hermon Dunlap Smith
Professor School of Social Service
Administration*

Penny Bender Sebring
Co-Founder

Marisa de la Torre
*Managing Director and Senior
Research Associate*

Steering Committee

Raquel Farmer-Hinton, Co-chair
University of Wisconsin, Milwaukee

Luisiana Meléndez, Co-chair
Erikson Institute

Institutional Members

Sarah Dickson
Chicago Public Schools

Elizabeth Kirby
Chicago Public Schools

Troy LaRaviere
*Chicago Principals and
Administrators Association*

Jesse Sharkey
Chicago Teachers Union

Tony Smith
Illinois State Board of Education

Individual Members

Kathleen Caliento
The Academy Group

Jahmal Cole
My Bloock, My Hood, My City

Gina Caneva
Lindblom Math & Science

Nancy Chavez
OneGoal

Katie Hill
*Office of the Cook County
State's Attorney*

Megan Hougard
Chicago Public Schools

Greg Jones
The Academy Group

Pranav Kothari
Revolution Impact, LLC

Amanda Lewis
University of Illinois at Chicago

Rito Martinez
Surge Institute

Shazia Miller
NORC at the University of Chicago

Michelle Morales
Mikva Challenge

Cristina Pacione-Zayas
Erikson Institute

Beatriz Ponce de León
Generation All

Paige Ponder
One Million Degrees

Rebecca Vonderlack-Navarro
Latino Policy Forum

Pam Witmer
Illinois Network of Charter Schools

John Zeigler
DePaul University

ABOUT THE UCHICAGO CONSORTIUM

The University of Chicago Consortium on School Research conducts research of high technical quality that can inform and assess policy and practice in the Chicago Public Schools. We seek to expand communication among researchers, policymakers, and practitioners as we support the search for solutions to the problems of school reform. The UChicago Consortium encourages the use of research in policy action and improvement of practice, but does not argue for particular policies or programs. Rather, we help to build capacity for school reform by identifying what matters for student success and school improvement, creating critical indicators to chart progress, and conducting theory-driven evaluation to identify how programs and policies are working. The UChicago Consortium is a unit of the Urban Education Institute.



THE UNIVERSITY OF
CHICAGO

UEI URBAN
EDUCATION
INSTITUTE

PARTNER



1313 East 60th Street
Chicago, IL 60637
consortium.uchicago.edu
T (773) 702-3364
@UChiConsortium

