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Minority Serving Institutions as Engines of Upward Mobility

Lorelle L. Espinosa
Robert Kelchen
Morgan Taylor

Acknowledgments

The authors are incredibly grateful to the individuals who helped shape this brief through conversation and written review. We are thankful to Jonathan M. Turk and Hollie M. Chessman, whose insight was critical in our interpretation of the analysis and framing of the brief.

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American Council on Education
One Dupont Circle NW
Washington, DC 20036

Executive Summary

Minority serving institutions (MSIs) play an integral role in the education of students from low-income families and communities of color where educational attainment is disproportionately low and income mobility can be stagnant. With a commitment to serve the nation and their surrounding communities, MSIs are engines of upward mobility for millions of students, and play this role even while the majority of MSIs are at a financial resource disadvantage when compared to non-MSIs.

In this brief, we use the newly released Equality of Opportunity Project data to examine the upward income mobility of students who attended MSIs compared to students who did not. Overall, we found that MSIs propel their students from the bottom to the top of the income distribution at higher rates than do non-MSIs. These findings shed important light on the value of MSIs as a viable path up the economic ladder for millions of students and reinforce the value proposition of higher education as a path to greater prosperity for individuals, families, and whole communities. Below are key highlights from the brief as it concerns mobility performance by four- and two-year institutions of higher education:

Four-Year Institutions

- One in five students enrolled at four-year Hispanic-Serving Institutions (HSIs) and nearly one in four students enrolled at four-year Predominantly Black Institutions (PBIs) and Historically Black Colleges and Universities (HBCUs) were from families in the lowest income quintile—more than three times that of non-MSIs. These MSIs also enrolled between 45 and 53 percent of first-generation college students.
- Across all MSI types, four-year MSIs propel more students from the lowest income quintile to the top income quintile than four-year non-MSIs. HSIs in particular had a mobility rate three times that of non-MSIs (4.3 percent compared to 1.5 percent). The mobility rate at Asian American and Native American Pacific Islander-Serving Institutions (AANAPISIs), PBIs, and HBCUs was double that of non-MSIs.
- An extended mobility rate—the rate of students who move from the bottom two income quintiles to the top two income quintiles—was also greater at MSIs compared to non-MSIs. HSIs, PBIs, and HBCUs in particular had a mobility rate double that of non-MSIs (approximately 20 percent compared to 9 percent).

Four-Year Institutions with Low Expenditures

Federal designation and funding for enrollment-based MSIs requires that these institutions have low educational and general expenditures. When examining characteristics of MSIs and non-MSIs with low expenditures ($25,000 per FTE and less), MSIs continue to serve as engines of mobility despite resource constraints.

- HSIs, AANAPISIs, and PBIs with low expenditures enrolled a larger percentage of students from the lowest income quintile than non-MSIs. This is especially true of HSIs and PBIs, where roughly one-fifth and one-quarter, respectively, of students were from families in the lowest income quintile, compared to 8 percent of students at non-MSIs.
- The mobility rate of all four-year MSIs with low expenditures was more than double that of four-year non-MSIs with low expenditures. HSIs and AANAPISIs had mobility rates of about 4 percent and PBIs had a mobility rate of 3.5 percent, compared to 1.5 percent for non-MSIs.

- The extended mobility rate of all four-year MSIs with low expenditures was higher than that of non-MSIs. HSIs and PBIs (21.5 percent and 20.8 percent, respectively) had extended mobility rates more than double that of non-MSIs (9.9 percent).

Two-Year Institutions

- Two-year HSIs, PBIs, and HBCUs enrolled a higher percentage of students from the lowest income quintile than two-year non-MSIs, with said enrollment at PBIs and HBCUs (29 percent and 33 percent, respectively) double that of non-MSIs (15 percent).
- The mobility rate of two-year MSIs was higher than that of two-year non-MSIs. HSIs in particular had a mobility rate of double that of non-MSIs (3.2 percent versus 1.5 percent).
- HSIs had an extended mobility rate of 17.2 percent, and AANAPISIs, PBIs, and HBCUs had extended mobility rates of about 13 percent. The extended mobility rate of non-MSIs in this sector was 10.9 percent.

The data presented in this report verify a working assumption of those familiar with MSIs—that these institutions are standouts in the field for their contribution to income mobility. This distinction is important given the outsized performance of MSIs in generating upward income mobility even while they are operating with limited resources. One sees a strong case here for increased investment in institutions that are meeting students where they are, and making good on the value of higher education for individuals, families, and communities. Further, across the whole of higher education we could stand to learn and share the policies and practices employed by the top-performing MSIs, such that the field can learn from their success.

Introduction

Despite a current, troubling narrative that a college education is losing its value in the marketplace,[1] postsecondary training remains the most viable route up the economic ladder in American society. The economic and noneconomic[2] benefits of attending college are large (Ma, Pender, and Welch 2016). According to leading estimates, individuals with some postsecondary training stand to earn nearly half a million dollars more over their career than those with only a high school diploma (Carnevale, Garcia, and Gulish 2017). By way of a recent illustration, the vast majority of jobs (99 percent) created since the Great Recession have gone to individuals with at least some postsecondary education (Carnevale, Jayasundera, and Gulish 2016). As of December 2017, the unemployment rate of those with a college credential stood at just 2.7 percent, compared to 4.6 percent for those without a college credential[3] (U.S. Bureau of Labor Statistics). With a full 65 percent of American jobs expected to require some form of postsecondary education in 2020 (Carnevale, Smith, and Strohl 2013), such trends show no signs of abating.

Yet if higher education is to truly make good on this economic commitment, policymakers, public and private industry, and other important stakeholders need to pay due attention to those colleges and universities with the greatest potential to educate a growing and changing American populace. The twenty-first-century college student is increasingly drawn from communities of color and those in the bottom two income quintiles—demographic backgrounds that represent higher shares of first-generation college students (Redford and Mulvaney Hoyer 2017). The nation's minority serving institutions, also known as MSIs, are poised to meet widespread demand for higher education by such students, and as the research findings presented in this brief show, already display a strong track record of providing the upward income mobility that undergirds the American dream.

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Considering the paramount role of higher education in providing a pathway up the economic ladder—namely, the ability for young people to realize a stronger economic future than that of their parents[4]—it only makes sense that we examine students' movement from one income quintile to another. Yet it was not until recently that such data were available. Instead, the prevailing measures have been metrics such as graduation rates and student loan default rates. While certainly important, such measures paint just part of the picture. Moreover, in the case of MSIs—the majority of which enroll post-traditional students[5]—these measures are problematic given that they only capture a fraction of their students. This is because prevailing national data, namely out of the U.S. Department of Education, emphasize first-time, full-time students, with limited

1 See recent polls from *The Wall Street Journal* (Mitchell and Belkin 2017) and Pew Research Center (Fingerhut 2017).

2 In addition to the individual economic benefit of higher education, research from the College Board shows college graduates live healthier lifestyles, are more active citizens, and are more likely to be employed, resulting in reduced participation in public assistance programs.

3 Unemployment rate is seasonally adjusted.

4 Research conducted by Raj Chetty, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez (2014) on intergenerational mobility of children relative to their parents shows that greater upward mobility occurs in areas with higher college attendance rates for children from low-income backgrounds, suggesting that higher education is an important pathway up the economic ladder.

5 For more information on post-traditional learners in higher education, see Soares, Gagliardi, and Nellum 2017.

ability to track the outcomes of part-time students and those who attend more than one institution of higher education.[6] Further, current data are unable to capture post-graduate outcomes.

These data strengthen our knowledge of the value of higher education by providing mobility outcomes for students from a wide variety of colleges and universities; that is, the percentage of college-goers from lower-income families who move into the country's middle and upper income brackets.

The findings in this brief present a first-of-its-kind analysis, focusing on MSIs and utilizing newly released data from the Equality of Opportunity Project,[7] to show the role that higher education has played in helping individuals move up the economic ladder. In 2017, this project, led by economists Raj Chetty, John Friedman, and Nathaniel Hendren, unveiled a large and robust new dataset of upward income mobility rates by parental income using de-identified data from income tax returns and the U.S. Department of Education. In short, these data strengthen our knowledge of the value of higher education by providing mobility outcomes for students from a wide variety of colleges and universities; that is, the percentage of college-goers from lower-income families who move into the country's middle and upper income brackets. As one would expect, outcomes across institutions of higher education vary. Yet as the data show, the country's MSIs are strong contributors to upward mobility[8] given both the students they serve and the power of the education they offer.

6 In 2017, the U.S. Department of Education released a new set of outcome measures in an effort to provide broader coverage of student success, in particular for non-first-time, full-time students (Jones 2017), although limitations still exist, including a continued emphasis by policy audiences on the standard graduation rate.

7 For more work by the Equality of Opportunity Project, see http://www.equality-of-opportunity.org.

8 The terms upward mobility, income mobility, and upward income mobility are used interchangeably.

Table 1. Minority Serving Institutions at a Glance

MSI Type	Acronym	Federal Recognition	Definition
Historically Black Colleges and Universities	HBCU	Higher Education Act of 1965[1]	Any historically black college or university established prior to 1964, whose principal mission was, and is, the education of black Americans.
Tribal Colleges and Universities	TCU	Tribally Controlled College or University Assistance Act of 1978[2,3]	Institutions chartered by their respective Indian tribes through the sovereign authority of the tribes or by the federal government with the specific purpose to provide higher education opportunities to American Indians through programs that are locally and culturally based, holistic, and supportive.
Hispanic-Serving Institutions	HSI	Higher Education Act of 1992[4]	Institutions with 25 percent or more total undergraduate Hispanic full-time equivalent student enrollment.
Alaska Native- and Native Hawaiian-Serving Institutions	ANNH	Higher Education Act of 1998[5]	Alaska Native-Serving Institutions are institutions that have at least 20 percent Alaska Native students. Native Hawaiian-Serving Institutions are institutions that have at least 10 percent Native Hawaiian students. These institutions are collectively referred to as ANNH institutions.
Asian American and Native American Pacific Islander-Serving Institutions	AANAPISI	College Cost Reduction and Access Act of 2007[6,7]	Institutions that have at least 10 percent enrollment of Asian American Pacific Islander students.
Predominantly Black Institutions	PBI	Higher Education Opportunity Act of 2008[8]	Institutions that serve at least 1,000 undergraduate students; have at least 50 percent low-income or first-generation to college degree-seeking undergraduate enrollment; have low per-full-time undergraduate expenditure in comparison with other institutions offering similar instruction; and enroll at least 40 percent African American students.[9]
Native American-Serving, Nontribal Institutions	NASNTI	Higher Education Opportunity Act of 2008	Institutions that have at least 10 percent enrollment of Native American students.[10]

1 Higher Education Act of 1965, Pub. L. No. 89–329 (1965).
2 Tribally Controlled College or University Assistance Act of 1978, Pub. L. No. 95–471 (1978).
3 TCUs were not established by this piece of legislation, as they are founded by individual Native tribes. Rather, this piece of legislation provides federal support for these institutions.
4 Higher Education Act of 1992, Pub. L. No. 102–325 (1992).
5 Higher Education Act of 1998, Pub. L. No. 105–244 (1998).
6 College Cost Reduction and Access Act of 2007, Pub. L. No. 110–84 (2007).
7 AANAPISIs were first designated under the College Cost Reduction and Access Act of 2007. The AANAPISI program was further expanded under the Higher Education Opportunity Act of 2008 (AANAPISI 2016).
8 Higher Education Opportunity Act of 2008, Pub. L. No. 110–315 (2008).
9 It is important to note that these institutions are not the same as HBCUs in that PBIs are predicated on the institution meeting an enrollment threshold and HBCUs were established for the primary purpose of educating black students.
10 It is important to note that these institutions are not the same as TCUs in that NASNTIs are predicated on the institution meeting an enrollment threshold, and TCUs were established for the purpose of educating Native American students.

The Role of MSIs in American Higher Education

The importance of MSIs to individual students, families, communities, and our national economy cannot be overstated. MSIs are ubiquitous to the postsecondary landscape, representing roughly one-fifth of all degree-granting, Title IV-eligible institutions of higher education in 2014–15. In this same year, taken together, approximately 700 MSIs enrolled 4.8 million students, or 28 percent of all undergraduates enrolled in U.S. higher education (Espinosa, Turk, and Taylor 2017). They enroll far larger percentages of minority and low-income students than the national average, providing opportunities for upward mobility (Penn Center for Minority Serving Institutions 2014), and award a disproportionate share of degrees to minority students in fields such as education and engineering as well as preparing students for doctoral studies (Burrelli and Rapoport 2008). Finally, there is evidence that MSIs provide students of color with stronger academic experiences and more supportive environments while in college than do non-MSIs (Nelson Laird et al. 2007; Seymour and Ray 2015; Conrad and Gasman 2015).

Nearly all of the projected postsecondary enrollment growth through 2025 will be through increased enrollment by racial and ethnic minority students, with minority students comprising nearly half of all postsecondary students within the next decade.

With such a strong presence in American postsecondary education, it is no surprise that MSIs can be found in nearly every state and are located in all regions of the country, including seven territories. They are spread across rural, urban, and suburban locations, and while they historically have been prevalent in distinct areas of the country, that too is starting to change given a rapidly changing American demographic. What is more, the number of MSIs is expected to grow in the years to come. Nearly all of the projected postsecondary enrollment growth through 2025 will be through increased enrollment by racial and ethnic minority students, with minority students comprising nearly half of all postsecondary students within the next decade (Hussar and Bailey 2017). Furthermore, surveys conducted over the last two decades consistently show that minority families place a higher value on higher education than do white families. This may be in part due to the fact that minority Americans without a college education have far worse economic outcomes than similarly educated white Americans (College Board and *National Journal* 2014; Immerwahr 2000; Taylor et al. 2011).

Federal legislation further requires that institutions have low education and general expenditures to receive federal designation and participate in the U.S. Department of Education's MSI capacity building grant programs.

A final point of importance concerns the role of MSIs in educating the country's most vulnerable students while at the same time doing so with limited resources. The financial circumstances of students enrolled at MSIs prohibit these institutions from raising tuition as a means to increase institutional revenue (Nellum and Valle 2015; Nelson and Frye 2016; Saunders, Williams, and Smith 2016). As a result, public MSIs rely heavily on public funding as sources of revenue at greater levels than do their non-MSI counterparts (Nellum and Valle 2015; Nelson and Frye 2016). At public two-year Hispanic-Serving Institutions (HSIs), for example, nearly two-thirds of all revenue comes from state and local sources, compared to 51 percent for public two-year non-MSIs (Nellum and Valle 2015). Similarly, over half (54 percent) of all revenue shares at public four-year HBCUs come from federal, state, and local appropriations, grants, and contracts, compared to 38 percent of non-HBCUs in the same sector (Williams and Davis, forthcoming). Tribal Colleges and Universi-

ties (TCUs) present a special case in that over 70 percent of their revenue come from federal sources (Nelson and Frye 2016). In addition, for MSIs predicated on enrollment (all MSIs with the exception of HBCUs and TCUs), federal legislation further requires that institutions have low educational and general expenditures to receive federal designation and participate in the U.S. Department of Education's MSI capacity building grant programs.

MSI Contributions to Upward Income Mobility

Although there is a growing body of research examining the role and effectiveness of minority serving institutions in educating an increasingly diverse American populace, there is little research exploring the degree to which MSIs are fostering upward income mobility among their students, who are also disproportionately from low-income backgrounds, when compared to non-MSIs. The analyses presented here attempt to address this knowledge gap by examining the newly released Equality of Opportunity Project dataset, which tracks the 1980–91 birth cohorts of young adults through 2014 by using student and parent tax records from the Internal Revenue Service.

At a time when so many Americans feel left behind, it is important for policymakers and educators alike to recognize the value of higher education in promoting upward mobility, and to strengthen this value proposition by ensuring that those institutions in the best position to educate low-income students receive the resources they need.

It is worth noting at the outset that the whole of higher education—MSI and non-MSI—is making a considerable contribution to the upward mobility of Americans who begin in the bottom two quintiles of family income. This is significant and necessary to the success of our economy and to individual and family prosperity and wealth. At a time when so many Americans feel left behind, it is important for policymakers and educators alike to recognize the value of higher education in promoting upward mobility, and to strengthen this value proposition by ensuring that those institutions in the best position to educate low-income students receive the resources they need. As the Equality of Opportunity Project data show—in this study but also in the work released by Chetty and his colleagues—it is also the case that there are differences across institutions in terms of how well they do in promoting upward mobility. This is the case across individual institutions and across institution types, including across MSI types.

Institutional differences aside, when looking across the board, our findings show that MSIs contribute to the upward mobility of their students at rates similar to—and in many cases exceeding that of—their non-MSI counterparts.[9] This finding is significant for a number of reasons, not the least of which is the fact that MSIs continue to enroll a disproportionate share of low-income students, and educate these students with limited resources, including an inability to rely on tuition revenue to sustain their educational offerings in the way that so many other institutions do.

Institutional differences aside, when looking across the board, our findings show that MSIs contribute to the upward mobility of their students at rates similar to—and in many cases exceeding that of—their non-MSI counterparts.

MSIs in fact represent the very kind of institutions that Chetty and his colleagues put forth as possible "engines of upward mobility"

9 Non-MSIs are defined as institutions in the sample that did not meet the historical designation for HBCUs or TCUs and also did not meet any of the enrollment thresholds to be designated as one of the five types of enrollment-based MSIs.

(Chetty et al. 2017, 25), both for the great access they provide to low-income students and, in many cases, for the student outcomes they produce. A recent report by Espinosa, Turk, and Taylor (2017) shows that when utilizing National Student Clearinghouse data (as opposed to graduation rate data provided by the U.S. Department of Education), the total completion rate of students at MSIs is significantly higher than previously understood. And while it is true that within MSI categories, there are higher and lower performing institutions, there is enough evidence to warrant a closer look at MSIs as institutions poised to provide a pathway up the economic ladder for millions of students.

Methods

In this study, we analyzed data derived from the Equality of Opportunity Project (EOP) and the Integrated Postsecondary Education Data System (IPEDS) to capture the role of MSIs in promoting upward mobility.[10] The EOP data used in our study focused on a cohort of students who were born between 1983 and 1985 and who began college in approximately the 2002–03 academic year. To measure upward mobility, this dataset captured income information on individuals in the sample at two time periods. First, it captured the earnings of these students' parents at the time of the students' first postsecondary enrollment. Next, it measured the income of the students themselves at age 30. In both cases, income data were reported in terms of quintiles, and all individual student-level data were aggregated and reported at the postsecondary institution level. We then relied on enrollment, institutional characteristics, and finance data from IPEDS to assign institutions their appropriate MSI designation (or non-MSI designation); to classify them as either two- or four-year institutions; and to identify which four-year institutions had low general expenditures.

Table 2 provides an overview of the institutions included in our final sample of 1,911 institutions. Specifically, it presents the number of two- and four-year MSIs in our sample, as well as a sub-sample of four-year institutions with low general expenditures. Again, we used IPEDS institutional characteristics data to identify HBCUs, and fall enrollment data to flag institutions as HSIs, Asian American and Native American Pacific Islander-Serving Institutions (AANAPISIs), and Predominantly Black Institutions (PBIs) if they met the respective student enrollment thresholds described in Table 1. Institutions were not restricted to only one MSI designation. If institutions met multiple MSI enrollment thresholds, the institutions were included in each MSI group as appropriate. As a result, our final sample included 359 institutions with at least one MSI designation. We then used IPEDS finance data to flag four-year institutions with low general expenditures—those with expenditures of $25,000 per FTE or less—in order to approximate the number of MSIs (and non-MSIs) by enrollment that would meet the "low educational and general expenditures" required to participate in the U.S. Department of Education's MSI capacity building grant programs.

10 For more information on the Equality of Opportunity Project and related datasets, see Chetty et al. 2017.

Table 2. Number of Institutions in Sample

	Four-Year		Two-Year
Type of Institution	**Total**	**Low Expenditure**	**Total**
HSI	47	39	53
AANAPISI	112	44	44
PBI	11	11	40
HBCU	69	NA	6
Non-MSI	948	714	604

Note:
(1) A few institutions have multiple MSI designations and thus appear in multiple MSI types.
(2) Low expenditure is defined as institutions with expenditures of $25,000 per FTE or less.
(3) Federal legislation does not require that HBCUs have low educational and general expenditures to receive federal designation and funding as it does for MSIs predicated on enrollment. Therefore, HBCUs were omitted from the analysis of this restricted sample.

It is important to note that there are both more MSIs and MSI categories than the ones captured in our study. First, we were unable to accurately identify Alaska Native/Native Hawaiian and Native American-Serving Nontribal Institutions due to limitations of IPEDS enrollment by race data. Due to small sample size, we were unable to analyze data for TCUs. Furthermore, the EOP dataset does not include institutions located in U.S. territories. As a result, our sample excluded a small number of MSIs operating outside of the 50 states and the District of Columbia. Finally, institutions that were too small to produce reliable estimates of upward mobility or that reported only system-level estimates were excluded from our final sample.

With the sample created, we set out to explore four key mobility outcomes. For the first outcome, we described where students who came from families in the lowest quintile of income fell on the income distribution at age 30. We then replicated this for students who came from families in the second lowest quintile. The second key outcome—the mobility rate—was calculated by taking the proportion of an institution's students who came from families in the bottom quintile of the income distribution (lowest-income students) and multiplying that by the proportion of these lowest-income students who by age 30 moved to the top quintile of the income distribution.[11] The final key outcome—the extended mobility rate—was calculated by taking the proportion of an institution's students who came from families in the bottom or second quintile of the income distribution (low-income students) and multiplying that by the proportion of these low-income students who by age 30 moved to the fourth or fifth quintiles of the income distribution.

Findings

We begin this section with an overview of institutional and student characteristics, broken out by MSI type and non-MSIs, to provide context around the differences among these institutions. We then discuss the findings from our analysis for each of the three outcomes and provide examples of institutions with high mobility rates by MSI type.

11 For more information on the calculation of the intergenerational mobility rate for colleges and universities, see Chetty et al. 2017.

Institutional and Student Characteristics

Four-Year Institutions

A first noteworthy characteristic of four-year HSIs, PBIs, and HBCUs, in particular, is the high percentage of first-generation college students, having respectively represented 49, 53, and 45 percent of the student body at these institutions (see Table 3). The proportion of low-income students was also high for these three types of MSIs, especially when compared to non-MSIs (see Table 3). One-fifth to over one-half of students attending were in the bottom two quintiles of family income. While per-FTE expenses vary across institutional types, per-FTE endowment values were the lowest at HSIs, PBIs, and HBCUs. And while there are only 11 PBIs in the four-year sample, their per-FTE endowment value stood at just $2,813. The next largest value among the MSIs studied was five-and-a-half times this amount. Finally, it is hard not to notice the great difference between four-year AANAPISIs and everyone else in terms of expenditures. It is worth noting here that this category of MSIs is made up of a large number of private institutions, including some of the nation's most elite schools (this difference levels out when examining AANAPISIs with low expenditures).

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Table 3. Institutional and Student Characteristics at Four-Year Institutions, by MSI Type

	Non-MSI	HSI	AANAPISI	PBI	HBCU
Institutional Characteristics					
Public (%)	31.0	61.7	40.2	54.5	49.3
Full-time equivalent enrollment	4,949	6,751	11,398	3,418	2,926
Per-FTE total expenses ($)	22,631	28,072	76,847	14,577	29,697
Per-FTE endowment value ($)	27,858	15,434	115,816	2,813	15,275
Student Characteristics					
Percent first-generation students	37.3	48.5	29.7	52.5	44.7
Percent of parents by income quintile					
Lowest	7.0	20.6	8.6	23.5	24.2
Second-lowest	11.8	22.5	11.2	27.2	28.9
Middle	19.0	20.2	14.2	22.0	21.2
Second-highest	26.7	18.1	18.6	16.7	15.7
Highest	35.4	18.6	47.3	10.5	10.0
Number of Institutions	**948**	**47**	**112**	**11**	**69**

Sources: Equality of Opportunity Project (parental income), College Scorecard (percent first-generation), Integrated Postsecondary Education Data System (all other measures).

Notes:
(1) There is a small amount of missing data for some measures.
(2) A few institutions have multiple MSI designations and thus appear in multiple MSI columns.
(3) All variables are adjusted for inflation into 2016 dollars using the Consumer Price Index.

Four-Year Institutions with Low Expenditures

Legislation requires that enrollment-based MSIs have low educational and general expenditures to receive federal designation. Because some institutions with higher institutional resources do reach the enrollment threshold necessary for MSI eligibility, we created a restricted sample, which includes only those institutions with expenditures of $25,000 per FTE or less. This allows for the examination of how outcomes may differ for those MSIs that face greater resource challenges. It is important to note that federal legislation does not require that HBCUs have low educational and general expenditures to receive federal designation and funding as it does for MSIs predicated on enrollment. Therefore, HBCUs were omitted from the analysis of this restricted sample (see Table 4). Examining institutions with below average expenditures somewhat levels the playing field in terms of difference across the various institutional and student characteristics presented. That being said, MSIs nonetheless came in lower on expenditures in almost all cases when compared to non-MSIs. Further, endowment values were twice as low at MSIs.

Table 4. Institutional and Student Characteristics at Four-Year Institutions with Low Expenditures ($25,000 per FTE or less), by MSI Type

	Non-MSI	HSI	AANAPISI	PBI	HBCU
Institutional Characteristics					
Public (%)	33.3	61.5	63.6	54.5	NA
Full-time equivalent enrollment	4,554	6,677	11,726	3,418	NA
Per-FTE total expenses ($)	16,209	15,895	15,954	14,577	NA
Per-FTE endowment value ($)	10,994	4,694	4,548	2,813	NA
Student Characteristics					
Percent first-generation students	40.1	49.3	40.6	52.5	NA
Percent of parents by income quintile					
Lowest	7.5	20.9	12.6	23.5	NA
Second-lowest	12.7	23.0	15.8	27.2	NA
Middle	20.3	20.3	17.9	22.0	NA
Second-highest	28.0	18.0	21.2	16.7	NA
Highest	31.6	17.8	32.4	10.5	NA
Number of Institutions	**714**	**39**	**44**	**11**	**NA**

Sources: Equality of Opportunity Project (parental income), College Scorecard (percent first-generation), Integrated Postsecondary Education Data System (all other measures).

Notes:
(1) There is a small amount of missing data for some measures.
(2) A few institutions have multiple MSI designations and thus appear in multiple MSI columns.
(3) All variables are adjusted for inflation into 2016 dollars using the Consumer Price Index.
(4) Federal legislation does not require that HBCUs have low educational and general expenditures to receive federal designation and funding as it does for MSIs predicated on enrollment. Therefore, HBCUs were omitted from the analysis of this restricted sample.

Two-Year Institutions

Similar to their four-year counterparts, two-year MSIs enrolled a high proportion of first-generation college students (see Table 5). Across all two-year MSIs in this study, first-generation students represented half (and in the case of HSIs, PBIs, and HBCUs, more than half) of all students enrolled. The proportion of low-income students at HSIs, PBIs, and HBCUs was also much higher than that of non-MSIs, with 49.9 percent to 61.2 percent of students coming from families in the bottom two income quintiles. Per-FTE expenses vary across two-year institutions, with AANAPISIs, PBIs, and HBCUs having the lowest. Another noteworthy characteristic to mention is the per-student endowment of two-year MSIs compared to non-MSIs. In all cases, the endowment value of MSIs was thousands of dollars lower than that of non-MSIs. Two-year AANAPISIs had the lowest at $190 per student, compared to non-MSIs at $3,204.

Table 5. Institutional and Student Characteristics at Two-Year Institutions, by MSI Type

	Non-MSI	HSI	AANAPISI	PBI	HBCU
Institutional Characteristics					
Public (%)	96.4	98.1	97.7	100.0	100.0
Full-time equivalent enrollment	3,517	6,511	9,047	3,209	2,129
Per-student total expenses ($)	11,464	11,500	10,097	10,395	10,799
Per-student endowment value ($)	3,204	320	190	287	223
Student Characteristics					
Percent first-generation students	55.3	59.4	50.1	58.6	59.7
Percent of parents by income quintile					
Lowest	15.0	24.6	16.2	28.8	32.8
Second-lowest	19.7	25.3	18.7	27.0	28.4
Middle	24.5	21.5	20.5	19.5	17.7
Second-highest	25.4	17.3	21.7	16.3	14.9
Highest	15.4	11.3	22.8	8.3	6.2
Number of Institutions	**604**	**53**	**44**	**40**	**6**

Sources: Equality of Opportunity Project (parental income), College Scorecard (percent first-generation), Integrated Postsecondary Education Data System (all other measures).

Notes:
(1) There is a small amount of missing data for some measures.
(2) A few institutions have multiple MSI designations and thus appear in multiple MSI columns.
(3) All variables are adjusted for inflation into 2016 dollars using the Consumer Price Index.

Mobility Outcomes

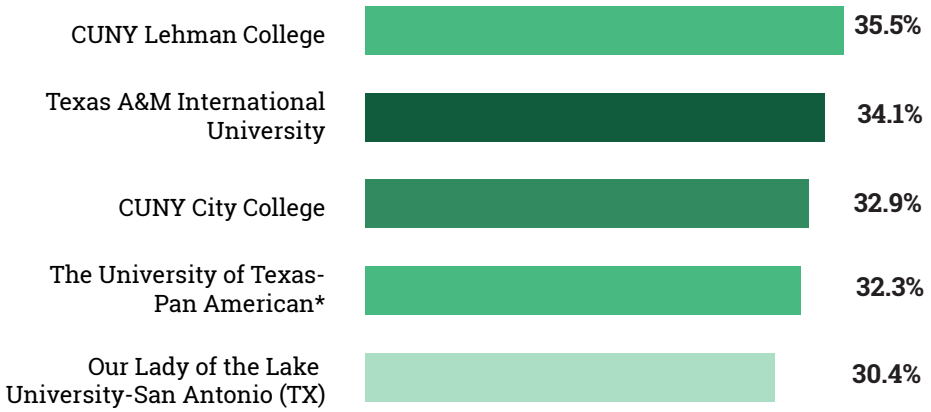
In their work on the role of colleges in intergenerational mobility, Chetty and his colleagues define the upward income mobility rate of an institution as "product of its low-income *access*, the fraction of its students who come from families in the bottom quintile, and its *success* rate, the fraction of students who reach the top quintile" (emphasis in original, 23). They find that several factors correlated with the mobility rate of institutions, including the variation of access across institutions and differences in the racial/ethnic makeup of

students enrolled (Chetty et al. 2017). Therefore, one would expect MSIs to have higher mobility rates due to the percent of students they enroll from low-income backgrounds, and in fact, we do find this.

We look at movement from the very bottom to the very top, similar to Chetty's analysis, as well as the mobility rate of students who come from families in the bottom two quintiles and end up in the top two quintiles for each MSI type.

Findings from the analysis published by Chetty and his colleagues show an average mobility rate of 1.9 percent for across all colleges in the U.S. (Equality of Opportunity Project 2017). In this analysis, we compare the average upward mobility rate of MSIs as groups of institutions, compared to a grouping of non-MSIs. We look at movement from the very bottom to the very top, similar to Chetty's analysis,[12] as well as the mobility rate of students who come from families in the bottom two quintiles and end up in the top two quintiles for each MSI type. This expanded definition of mobility provides a wider lens through which to examine the contribution of MSIs to intergenerational mobility.

Figure 1. HSIs with High Extended Mobility Rates



Note: These institutions are examples of HSIs with high extended mobility rates, measured as the fraction of students who come from families in the bottom two income quintiles and end up in the top two income quintiles as adults. These data reflect institutions that met the enrollment threshold for an HSI in the 2002–03 academic year for which there were data available through the Equality of Opportunity Project. It does not include those institutions that met the enrollment threshold in that year, but did not have mobility rate data. It also does not include institutions that may have met the enrollment threshold after the 2002–03 academic year.

*University of Texas–Pan American merged with University of Texas–Brownsville in 2013 into The University of Texas Rio Grande Valley.

Four-Year Institutions

Across all MSI types, four-year MSIs have higher mobility rates than that of four-year non-MSIs (see Table 6). HSIs had a mobility rate (4.3 percent) three times that of non-MSIs (1.5 percent), meaning HSIs propel three times as many students from the lowest income quintile to the top income quintile by age 30 as non-MSIs. AANAPISIs and PBIs had a mobility rate (3.3 percent and 3.5 percent) more than double of that of non-MSIs. HBCUs had a mobility rate of 2.8 percent, also higher than that of non-MSIs.

When considering the extended mobility rate, HSIs, PBIs, and HBCUs in particular had mobility rates more than double that of non-MSIs. HSIs and PBIs both had an extended mobility rate of 20.8 percent. HBCUs

12 In their analysis, Chetty and colleagues assign children into income percentiles relative to the earnings of other children in their birth cohort.

had an extended mobility rate of 19.3 percent and AANAPISIs had an extended mobility rate of 12.1 percent—also higher than that of non-MSIs (9.4 percent). In looking at these mobility rate data, it is important to keep in mind that MSIs vary greatly in their histories, institutional resources, and structure, and the student bodies they serve. Four-year AANAPISIs, for example, serve more students than other MSI types that come from families in the top two income quintiles (65.9 percent), meaning they have a smaller proportion of students who would be able to make that jump from the bottom two quintiles to the top two.

Finally, while four-year MSIs had a higher mobility rate than that of four-year non-MSIs, the distribution of low-income students who remained in the bottom quintiles as adults was nearly the same across institutions. The majority of low-income students, whether they attended an MSI or not, moved to a higher income quintile as adults than when they first enrolled in postsecondary education, suggesting higher education contributes to moving students up the economic ladder.

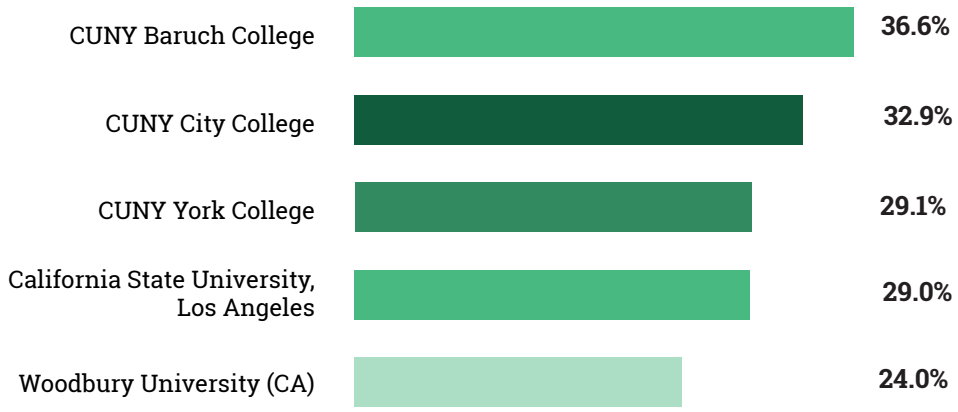
Table 6. Student Outcomes at Four-Year Institutions, by MSI Type

	Non-MSI	HSI	AANAPISI	PBI	HBCU
Mobility Rate (%)	**1.5**	**4.3**	**3.3**	**3.5**	**2.8**
Extended Mobility Rate (%)	**9.4**	**20.8**	**12.1**	**20.8**	**19.3**
Outcomes of students starting in lowest income quintile (% Distribution in 2014)					
Remained in bottom quintile	12.3	13.4	12.2	14.5	11.4
Reached second quintile	16.5	17.2	12.4	24.0	24.0
Reached middle quintile	21.1	20.8	13.5	24.6	28.5
Reached fourth quintile	25.6	25.7	19.4	22.8	22.8
Reached top quintile	24.4	22.8	42.5	14.2	13.3
Outcomes of students starting in second income quintile (% Distribution in 2014)					
Fell to bottom quintile	10.4	12.4	10.9	11.5	10.4
Remained in second quintile	14.7	15.6	11.1	19.3	21.7
Reached middle quintile	20.5	20.6	13.7	25.1	28.1
Reached fourth quintile	27.2	26.2	20.5	26.1	24.9
Reached top quintile	27.2	25.2	43.9	18.1	14.8
Number of Institutions	**948**	**47**	**112**	**11**	**69**

Source: Equality of Opportunity Project

Notes:
(1) There is a small amount of missing data for some measures.
(2) A few institutions have multiple MSI designations and thus appear in multiple MSI columns.

Figure 2. AANAPISIs with High Extended Mobility Rates



Note: These institutions are examples of AANAPISIs with high extended mobility rates, measured as the fraction of students who come from families in the bottom two income quintiles and end up in the top two income quintiles as adults. These data reflect institutions that met the enrollment threshold for an AANAPISI in the 2002–03 academic year for which there were data available through the Equality of Opportunity Project. Therefore, it does not include those institutions that met the enrollment threshold in that year, but did not have mobility rate data. It also does not include institutions that may have met the enrollment threshold after the 2002–03 academic year.

Four-Year Institutions with Low Expenditures

The mobility rate of all four-year MSIs with low expenditures is more than double that of four-year non-MSIs with low expenditures (see Table 7). HSIs and AANAPISIs in this category had mobility rates of around 4 percent and PBIs had a mobility rate of 3.5 percent, compared to 1.5 percent at non-MSIs. The extended mobility rate of four-year non-MSIs with low expenditures rose slightly (9.9 percent) more than when considering the mobility rate of all four-year non-MSIs, but remained lower than that of all MSI types. The extended mobility rate of AANAPISIs and HSIs increased at 16.4 percent and 21.5 percent, respectively.

As with the nonrestricted sample, while MSIs with low expenditures had a higher mobility rate than that of non-MSIs with low expenditures, the distribution of low-income students who remained in the bottom quintiles as adults was nearly the same across institutions. The majority of low-income students, whether they attended an MSI or not, moved to a higher income quintile as adults than when they first enrolled in postsecondary education.

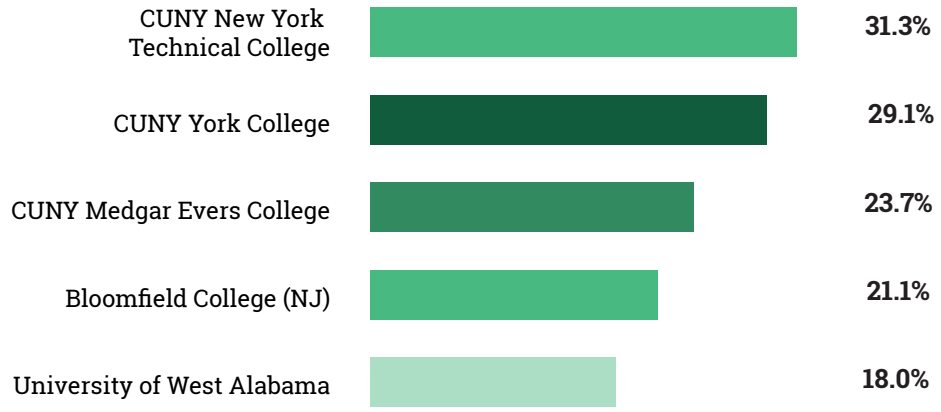
Table 7. Student Outcomes at Four-Year Institutions with Low Expenditures ($25,000 per FTE or less), by MSI Type

	Non-MSI	HSI	AANAPISI	PBI	HBCU
Mobility Rate (%)	**1.5**	**4.4**	**4.1**	**3.5**	**NA**
Extended Mobility Rate (%)	**9.9**	**21.5**	**16.4**	**20.8**	**NA**
Outcomes of students starting in lowest income quintile (% Distribution in 2014)					
Remained in bottom quintile	12.5	13.1	12.3	14.5	NA
Reached second quintile	17.1	16.6	13.9	24.0	NA
Reached middle quintile	22.0	20.9	16.0	24.6	NA
Reached fourth quintile	26.2	26.6	23.7	22.8	NA
Reached top quintile	22.2	22.8	34.2	14.2	NA
Outcomes of students starting in second income quintile (% Distribution in 2014)					
Fell to bottom quintile	10.5	12.3	11.1	11.5	NA
Remained in second quintile	15.1	15.6	13.0	19.3	NA
Reached middle quintile	21.4	20.5	15.9	25.1	NA
Reached fourth quintile	28.1	26.8	24.8	26.1	NA
Reached top quintile	25.0	24.9	35.2	18.1	NA
Number of Institutions	**714**	**39**	**44**	**11**	**NA**

Source: Equality of Opportunity Project

Notes:
(1) There is a small amount of missing data for some measures.
(2) A few institutions have multiple MSI designations and thus appear in multiple MSI columns.
(3) Federal legislation does not require that HBCUs have low educational and general expenditures to receive federal designation and funding as it does for MSIs predicated on enrollment. Therefore, HBCUs were omitted from the analysis of this restricted sample.

Figure 3. PBIs with High Extended Mobility Rates



Note: These institutions are examples of PBIs with high extended mobility rates, measured as the fraction of students who come from families in the bottom two income quintiles and end up in the top two income quintiles as adults. These data reflect institutions that met the enrollment threshold for a PBI in the 2002–03 academic year for which there were data available through the Equality of Opportunity Project. Therefore, it does not include those institutions that met the enrollment threshold in that year, but did not have mobility rate data. It also does not include institutions that may have met the enrollment threshold after the 2002–03 academic year.

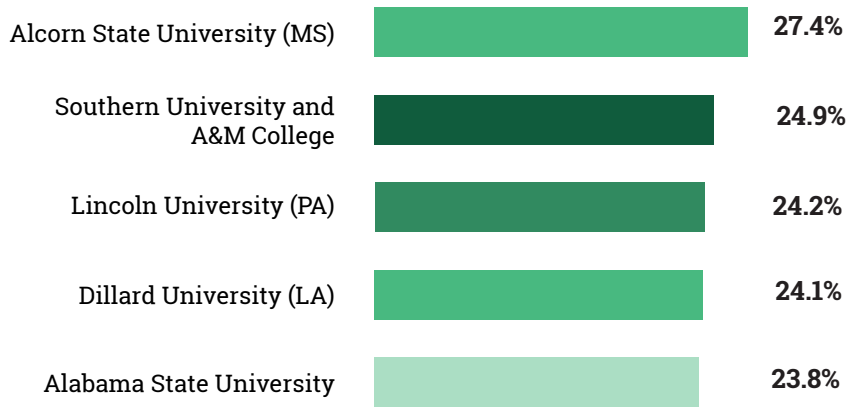
Two-Year Institutions

As with four-year institutions, two-year MSIs have higher mobility rates than non-MSIs in this sector (see Table 8). Two-year HSIs had a mobility rate double that of non-MSIs (3.2 percent versus 1.5 percent), meaning that two-year HSIs propel twice as many students from the lowest income quintile to the top income quintile by age 30 as non-MSIs. AANAPISIs, PBIs, and HBCUs also had higher mobility rates (2.4 percent for AANAPISIs and about 2 percent for PBIs and HBCUs) than that of non-MSIs.

Looking at the extended mobility rate, two-year MSIs also had higher mobility rates than non-MSIs. HSIs had an extended mobility rate of 17.2 percent, and AANAPISIs, PBIs, and HBCUs had extended mobility rates of about 13 percent. The extended mobility rate of non-MSIs in this sector was 10.9 percent.

As with four-year institutions, while two-year MSIs had a higher mobility rate than that of two-year non-MSIs, the distribution of low-income students who remained in the bottom quintiles as adults was nearly the same across institutions. The majority of low-income students, whether they attended an MSI or not, moved to a higher income quintile as adults than when they first enrolled in postsecondary education.

Figure 4. HBCUs with High Extended Mobility Rates



Note: These institutions are examples of HBCUs with high extended mobility rates, measured as the fraction of students who come from families in the bottom two income quintiles and end up in the top two income quintiles as adults. These data reflect institutions for which there were data available through the Equality of Opportunity Project. Therefore, the analysis did not include all HBCUs.

Table 8. Student Outcomes at Two-Year Institutions, by MSI Type

	Non-MSI	HSI	AANAPISI	PBI	HBCU
Mobility Rate (%)	**1.5**	**3.2**	**2.4**	**1.8**	**2.0**
Extended Mobility Rate (%)	**10.9**	**17.2**	**13.4**	**13.2**	**13.3**
Outcomes of students starting in lowest income quintile (% Distribution in 2014)					
Remained in bottom quintile	18.0	19.2	19.5	16.3	14.9
Reached second quintile	26.5	23.8	21.7	32.8	35.2
Reached middle quintile	26.0	24.4	21.8	29.0	28.7
Reached fourth quintile	19.0	19.3	21.4	15.5	15.0
Reached top quintile	10.5	13.3	15.6	6.4	6.3
Outcomes of students starting in second income quintile (% Distribution in 2014)					
Fell to bottom quintile	15.6	16.7	17.5	15.2	17.1
Remained in second quintile	23.2	21.6	20.0	28.9	31.2
Reached middle quintile	26.6	25.2	21.7	29.6	28.5
Reached fourth quintile	21.6	21.2	23.5	18.2	16.0
Reached top quintile	12.9	15.2	17.4	8.0	7.2
Number of Institutions	**604**	**53**	**44**	**40**	**6**

Source: Equality of Opportunity Project

Notes:
(1) There is a small amount of missing data for some measures.
(2) A few institutions have multiple MSI designations and thus appear in multiple MSI columns.

Discussion

MSIs play an integral role in the education of students of color, those from low-income backgrounds, and students who are first in their family to attend college. Before now, we could also presume that these institutions improved the lives of their graduates. The data presented in this report verify that working assumption with concrete numbers that show income mobility by students who attended MSIs across the country exceeding mobility rates at non-MSIs. This distinction is an important one to make at a time when public investment in higher education continues to decline, with great implications for institutions—including many MSIs—already struggling with low general and educational expenditures and endowment sizes. The distinction is further important given the outsized performance of MSIs in generating income mobility *even while* they are operating with limited resources. One sees a strong case here for increased investment in institutions that are meeting students where they are, and making good on the value of higher education for individuals, families, and communities.

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It could be expected that MSIs have higher mobility rates than that of non-MSIs given that Chetty and his colleagues found differences in institutional selectivity and the racial/ethnic makeup of students as factors that influence mobility rates. Even so, these differences are noteworthy. At a time when the MSI sector is growing by leaps and bounds, public and private investment is necessary and warranted. Also warranted is further research that can build upon these and other data on the performance of MSIs when it comes to student outcomes. Such research could examine differences across racial groups attending MSIs, as well as a longer time horizon by which to gauge income mobility. Given the profile of today's college student, and indeed of MSIs, it would be ideal to track graduates into their 30s and 40s in order to understand the arc of individuals' income mobility after college. Further, across the whole of higher education we could stand to learn and share the policies and practices employed by the top-performing MSIs, such that the field can learn from their success.

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