Economic Mobility Conundrums: A Closer Look at the Opportunity Insights University Rankings

By Jason D. Delisle and Cody Christensen

June 2020

Key Points

- Policymakers and the media are enthusiastic about ranking colleges based on students' economic mobility, but some healthy skepticism is warranted.
- Ranking colleges and universities based on students' economic mobility can unfairly advantage institutions in places with extreme income inequality.
- In one highly regarded mobility ranking, three states—New York, California, and Texas—accounted for 75 percent of all high-mobility colleges, even though these states are home to just 23 percent of higher education institutions.
- Data limitations from this popular ranking method effectively exclude one in five colleges from its results, even many prestigious state universities.

For years, it was common wisdom that the best colleges had highly selective admissions standards, top research departments, and wealthy alumni networks. But there is growing interest in assessing colleges on other qualities. Many observers believe that higher education institutions should be more than places that generate knowledge and foster world-class research; they should also create economic opportunities for low-income and disadvantaged students.[1]

Economic mobility (henceforth, "mobility") is becoming an increasingly popular way to judge higher education institutions. Popular college rankings, including *US News & World Report*, now incorporate a "social mobility" category into their methodology.[2] Colleges that enroll larger shares of low-income students or those who receive federal Pell Grants are assigned better scores.

Policymakers are also starting to emphasize mobility in higher education. Members of Congress have advanced legislation that, if enacted, would use federal funds to encourage or require colleges to expand access for students from low-income families.[3] The US Department of Education, under both the Barack Obama and Donald Trump administrations, has published information about students' average earnings after they leave a particular college or university, down to the degree and program level.[4]

Notably, these efforts rely on proxies for mobility; none measure it directly. They measure how many low-income students a college enrolls or graduates, but not what these students go on to earn. Or they measure what the average student

earns after leaving a school, but not what low-income students specifically earn. This is because the data needed to measure mobility at individual colleges and universities are not readily available.[5]

One recent exception, however, are the data released in 2017 by Opportunity Insights (formerly known as the Equality of Opportunity Project) led by Harvard economist Raj Chetty.[6] The group of researchers published a new dataset that promises to directly measure mobility at individual institutions, and they recently expanded that data in 2020.[7]

Mobility is heavily influenced by various factors and circumstances—some of which appear to be entirely outside an institution's control.

Opportunity Insights matched federal income tax records for all traditionally aged college students at nearly all institutions of higher education to their parents' income (obtained through millions of de-identified tax records and administrative data) and tracked data on their earnings across more than a decade. With these data, researchers could finally measure how colleges promote economic mobility—that is, where college students started on the income distribution as children and where they ended up as adults. Chetty et al. then identified the top 10 institutions with the highest mobility rates, referring to them as "engines of upward mobility."[8]

The top colleges identified in the ranking were lauded by the media, advocates, and policymakers, with the implication that these institutions have clearly made economic mobility a priority and have developed the best practices to achieve it.[9] Chetty et al. call specific attention to the top-performing institutions because, as they put it, "understanding what they do is useful for those who wish to replicate their successes in either the selection or the education of low-income students."[10] The rankings added yet more momentum to the interest in assessing colleges based on mobility.

This report argues, however, that the mobility rates derived from the Opportunity Insights dataset should be interpreted with caution. As Chetty et al. acknowledge, mobility is heavily influenced by various factors and circumstances—some of which appear to be entirely outside an institution's control. Regional income inequality and local labor market demographics, in particular, could explain a college's high mobility score—not any unique policies or practices. While the mobility that these colleges achieve for their students is valuable and real, it leaves us to wonder whether an institution with low mobility rates would achieve the same results simply by trading locations with high-mobility institutions.

There are additional concerns for those wishing to incorporate mobility rankings in public policy. For example, hundreds of large state universities were effectively excluded from the rankings (or received mediocre scores) because they report their data as a system, not individual institutions. Further, mobility rankings are highly sensitive to how mobility is defined. Several of the top-scoring institutions under Chetty et al.'s definition drop to the middle of the pack with even slight changes to how mobility is calculated.

Opportunity Insights Mobility Data

The Opportunity Insights dataset includes more than 28 million individuals born between 1980 and 1991 who enrolled at an institution of higher education as a 19-year-old dependent student between 1998 and 2009.[11] The data include records for the full universe of US tax filers, making it one of the largest and most comprehensive datasets for assessing income among college students and their families. It includes data for students at nearly all two-year and four-year public, nonprofit, and for-profit institutions of higher education.[12]

Opportunity Insights built the dataset first by identifying the institution of higher education each student attended using a tax form that colleges file with the IRS.[13] Researchers then linked that information with the student's household income (at the time a student enters college) using data from each family's federal tax returns. Finally, this information is linked to the student's own income using the student's personal income tax information approximately a decade after leaving the institution. The data reflect the students' income in 2014 when individuals from the first

three birth cohorts (1980, 1981, and 1982) were in their early 30s.

With this linked dataset, researchers can observe the share of students at each institution of higher education who came from low-income families (those in the bottom income quintile for all US households) who went on to earn incomes that would place them in the top income quintile for individuals in their early 30s. The bottom quintile includes students from households that originally earned less than $24,600, and the top quintile includes those with individual earnings above $55,800 (in constant 2015 dollars).[14]

That calculation forms the basis of Chetty et al.'s mobility score. Institutions with a large share of their low-income students moving to the top income quintile are said to generate high levels of mobility. Chetty et al. add one additional step to reward institutions that enroll a high share of low-income students. An institution's mobility rate is the share of low-income students that an institution serves (access), multiplied by the share of its low-income students who move from the bottom income quintile measured by their parents' income to the top income quintile using students' own post-enrollment income (success).

Mobility scores above 4 percent suggest that a college enrolls a disproportionately high share of low-income students or, alternatively, that it has a disproportionately high rate of moving students from the bottom income quintile to the top.[15] Income quintiles for both students and parents are based on the national income distribution regardless of where an institution of higher education is located.

Table 1. Top 10 Institutions by Mobility Rate

Published Ranking: CUNY Institutions Collapsed			**Unadjusted Ranking: CUNY Institutions Separate**		
Rank	Name	Mobility Rate	Rank	Name	Mobility Rate
1	California State University, Los Angeles (CA)	9.9%	1	**CUNY–Baruch College (NY)**	12.9%
2	Pace University in New York (NY)	8.4%	2	**CUNY–City College of New York (NY)**	11.7%
3	State University of New York at Stony Brook (NY)	8.4%	3	**CUNY–Lehman College (NY)**	10.3%
4	Technical Career Institutes (NY)	8.0%	4	California State University, Los Angeles (CA)	9.9%
5	University of Texas–Pan America (TX)	7.6%	5	**CUNY–John Jay College of Criminal Justice (NY)**	9.7%
6	**CUNY System (NY)**	7.2%	6	Pace University in New York (NY)	8.5%
7	Glendale Community College (CA)	7.1%	7	State University of New York at Stony Brook (NY)	8.4%
8	South Texas College (TX)	6.9%	8	**CUNY–New York City College of Technology (NY)**	8.4%
9	California State Polytechnic University, Pomona (CA)	6.8%	9	**CUNY–Brooklyn College (NY)**	8.1%
10	University of Texas at El Paso (TX)	6.8%	10	Technical Career Institutes (NY)	8.0%
	National Average	*1.9%*		*National Average*	*1.9%*

Note: Mobility rate is the percentage of students from the bottom income quintile multiplied by the share of students who move from the bottom to top income quintiles. CUNY institutions are bolded. The left panel, which is the ranking that Opportunity Insights released in 2017, presented the CUNY institutions as a single unit. On the right panel, we use the same data and present the top 10 institutions, with the only difference being that CUNY institutions are presented individually, as they originally appear in the dataset.
Source: Raj Chetty et al., "Mobility Report Cards: The Role of Colleges in Intergenerational Mobility" (working paper, National Bureau of Economic Research, Cambridge, MA, July 2017), www.nber.org/papers/w23618.pdf.

The average mobility rate for institutions in the data is 1.9 percent, and the top mobility institutions have rates above 5.5 percent.[16] Table 1 lists the 10 best-performing institutions using this measure of mobility, institutions that Chetty et al. originally called "engines of upward mobility."

Regional Differences Complicate Economic Mobility Rankings

After Chetty et al. released their research and rankings on the mobility rates for individual colleges, two researchers, Caroline Hoxby and Sarah Turner, raised concerns that geographic differences have a major influence on which institutions appear successful.[17] They show how differences in mobility can be heavily influenced by factors or circumstances outside the institution's control.

Low-income students may make up a relatively small share of an institution's home-state population, making it more difficult for colleges in these areas to find and enroll such students.[18] Similarly, an institution may be in an area with a relatively small number of low-income students who meet basic academic qualifications for college admissions, putting the institution at a disadvantage in achieving a high mobility rate. And some colleges are located in labor markets where incomes show relatively little variation. These regions might have fewer jobs that offer salaries in the highest national income quintile due to geographic differences in local economies.

Regardless of how well colleges in these states serve low-income students, higher education institutions experience greater challenges in achieving high mobility rankings due to those constraints.[19] Colleges in states with many low-income students, lower admissions requirements, and severe income disparities may achieve high mobility rates by virtue of their state's demographics and labor market, not by any special practices.

Hoxby and Turner mention the Opportunity Insights dataset in their analysis as one analytical framework that is susceptible to these flaws, but they do not test the mobility rankings directly. They use a different set of income data for their analysis.[20] We assess the Hoxby-Turner case directly using the Opportunity Insights data, starting with the top 10 institutions ranked by Chetty et al. (shown in Table 1). These 10 institutions, by Chetty et al.'s mobility measure, not only provide ample college access to low-income students but also help them move to the top of the income distribution. Chetty et al. center their conclusions around these high-achieving institutions, and the media coverage of their research focuses almost entirely on these 10 colleges.[21]

A college education undoubtedly helped propel students up the income ladder at these high-mobility institutions. Hoxby and Turner suggest, however, that a low-mobility institution might also achieve high mobility rates for its students if located in the same place as a high-mobility institution.[22] In other words, a college education matters for mobility, but the institution a student attends may not matter as much as most interpretations of the Chetty et al. mobility rankings imply.

It is certainly a positive outcome that a large share of low-income students at these institutions go on to achieve earnings in the top income quintile. And in some cases, these institutions deserve credit for promoting these valuable outcomes. Hoxby and Turner argue, however, that a college should not automatically be judged as *superior* to other institutions in generating mobility.[23]

A college education matters for mobility, but the institution a student attends may not matter as much as most interpretations of the Chetty et al. mobility rankings imply.

A cursory glance at Chetty et al.'s top 10 list suggests that top mobility colleges might benefit from the geographic advantages Hoxby and Turner identify. For example, the top 10 are in four cities (Brownsville, El Paso, Los Angeles, and New York City) that have large numbers of low-income residents and high-income households.[24] A closer look, however, suggests the top institutions are much more geographically concentrated than what Chetty et al. reveal.

Chetty et al. collapsed all 17 City University of New York (CUNY) institutions and presented the

Table 2. States with the Most Income Inequality Have a Disproportionate Share of High-Mobility Institutions

State Income Inequality Quintile	National Share of Institutions	Share of the 100 Highest-Mobility Institutions	Share of the 100 Lowest-Mobility Institutions
Q5 (Most Unequal)	35%	85%	7%
Q4	24%	11%	29%
Q3	23%	2%	30%
Q2	9%	2%	12%
Q1	9%	0%	22%

Note: States are divided into income inequality quintiles based on their Gini coefficient. More information is provided in Appendix A.
Source: Authors' calculations using Opportunity Insights data.

weighted average as one top-ranked institution, but the Opportunity Insights dataset lists each campus separately with its own statistics. Interestingly, they offer no justification for this decision and have made no similar adjustment for any other set of institutions in their analysis. The CUNY institutions are distinct campuses and show wide variation in mobility.[25] For the remainder of this report, all references to mobility rankings indicate a college's ranking when the CUNY institutions are presented individually.[26]

Without Chetty et al.'s adjustment, six of the 10 top-performing institutions in the Opportunity Insights dataset are actually CUNY schools, which are of course all in New York City. That means six of the 10 top-performing colleges are in New York City, and nine of the 10 top-performing colleges nationally are in New York state. (California State University, Los Angeles, is the only exception.)

Given the Hoxby-Turner critique, this concentration of high-mobility institutions in one city and one state should be cause for some healthy skepticism. Moreover, the city and state in this case—New York City and New York state—have an abundance of poverty and wealth, which could provide colleges a leg up in finding and enrolling low-income students. Similarly, it could be easier for former students to end up in jobs with relatively high incomes, since the local labor market in New York City offers many jobs with salaries above the top national income quintile. As a final example of how influential a New York City location might be for achieving a high mobility rate, consider that the worst-performing CUNY community college by Chetty et al.'s mobility score still outperforms the state flagship university with the highest mobility score nationally, University of California, Berkeley.[27]

Expanding the analysis beyond Chetty et al.'s top 10 list reveals that the more income disparity in a state, the more likely an institution in that state will have a high mobility rate. We illustrate this trend in two ways. In the first approach, we divide all 50 states and the District of Columbia (which we count as a state) into quintiles based on the level of income inequality (Gini coefficient) they exhibit. Each quintile includes roughly 10 states. (See Appendix A.) We then calculate the share of the 100 highest-mobility institutions and 100 lowest-mobility institutions in each of these quintiles.

The results, shown in Table 2, are consistent with the Hoxby-Turner critique. Eighty-five of the top 100 colleges are in the 10 states with the highest level of income inequality. These states are home to only 35 percent of all colleges nationally, meaning they appear to punch well above their weight in producing colleges with high mobility rates.

Three states in particular—California, New York, and Texas—are responsible for almost all of this overrepresentation. Seventy-five of the top 100 institutions are in one of these three states, even though only 23 percent of all colleges in the country are located there.[28] Higher education institutions in Louisiana, New Jersey, and Washington, DC—states that also exhibit high levels of income inequality—are also overrepresented in the top 100 institutions.

We see more evidence of the Hoxby-Turner critique on the other end of the mobility and income-inequality spectrum. States that make up the three lowest quintiles for income inequality, a group that includes 31 states, are home to just four

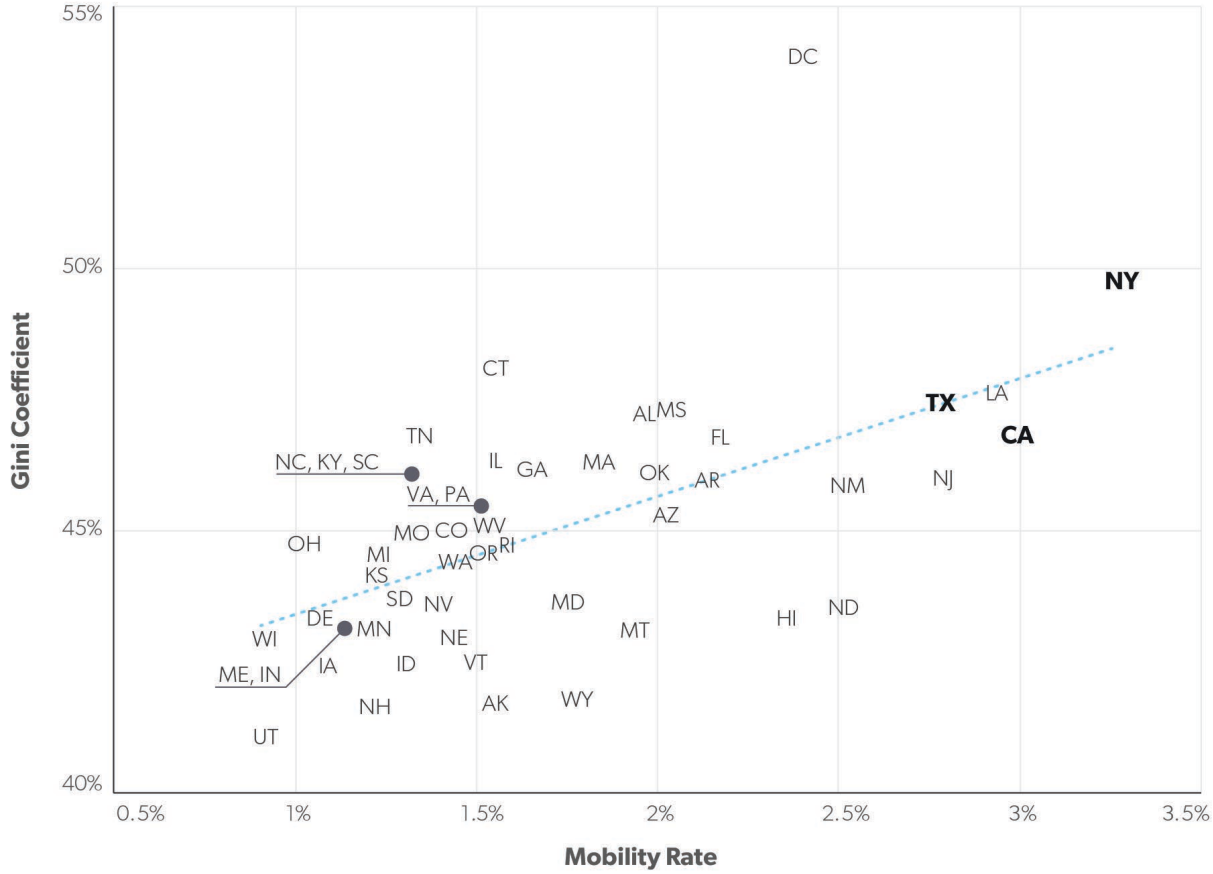
of the 100 highest-mobility institutions nationally. In a later section we discuss some of these institutions and why we think they, more than other institutions, may merit our interest. Continuing on this trend, we also find that states in the bottom quintile for income inequality include none of the 100 highest-mobility institutions.[29]

When we look at the 100 institutions with the lowest mobility rates, instead of the highest, we continue to observe a pattern consistent with the Hoxby-Turner critique. States in the quintile with the highest amount of income inequality are home to just seven of the lowest-mobility institutions. But states in the quintile with the least amount of income inequality are home to a disproportionately large share of the 100 lowest-mobility institutions. Nine percent of all institutions are in these states, but they are home to 22 percent of the lowest-mobility institutions.

The second way we assess the correlation between income inequality in each state and mobility among its institutions of higher education is to compare each state's level of income inequality against the average mobility rate of its colleges. Unlike the analysis above, which focuses on the 100 best and worst institutions in terms of mobility and groups states into quintiles based on income inequality, this approach allows us to take a global look at the average outcomes of *all* colleges state by state.

The results are shown in Figure 1 and suggest that the more unequal a state's income distribution, the higher its institutions score on mobility on average. The correlation coefficient is 57 percent, suggesting a moderately strong relationship. States with low amounts of income inequality, such as Iowa, Utah, and Wisconsin, are concentrated in the bottom left of Figure 1, indicating that institutions in these states have lower mobility rates,

Figure 1. Correlation Between State Income Inequality and Mobility Rate



Note: Gini coefficients are calculated using a two-year average for 2006 and 2007, which corresponds with the approximate time that students in the first three Opportunity Insights birth cohorts enter the labor market.
Source: Authors' calculations using Opportunity Insights and US Census Bureau data.

on average. But states with high levels of income inequality—such as Louisiana, New York, Texas, and Washington, DC—include colleges that produce the highest rates of mobility.

We bold California, New York, and Texas in Figure 1 to emphasize that these states are home to the 10 institutions that Chetty et al. identify as "engines of upward mobility." Colleges in New York state have the highest average mobility rate in the country, and New York also has the second-highest level of income inequality nationally. (It is second only to Washington, DC.)

Of course, there are some exceptions. North Dakota and Hawaii have relatively low levels of income inequality, but their colleges still produce impressive mobility rates on average. Connecticut, on the other hand, has high levels of income inequality, but its colleges do not usually generate high mobility rates, according to the Opportunity Insights data.

Table 3. Mobility Rates for Many Universities Are Only Reported as Averages for Entire Systems

Institutional Grouping	Number of Colleges in Grouping	Mobility Ranking
Louisiana State University System	3	344th
University of Illinois System	5	349th
University of Massachusetts System	5	359th
University of South Carolina System	8	583rd
University of Alaska System	15	668th
University of Maine System	10	769th
University of Nebraska System	3	851st
University of Tennessee System	3	857th
University of Colorado System	4	885th
University of Minnesota System	7	932nd
Indiana University System	8	1,126th
University of Wisconsin System	16	1,157th

Note: There are 1,297 institutions in the sample, where first represents the top-performing institution using Chetty et al.'s definition of mobility. This is a selected list of major university systems in the Opportunity Insights dataset. In total, there are 65 institutional groupings that represent more than 340 individual colleges.
Source: Authors' calculations using Opportunity Insights data.

Administrative Groupings Mask Mobility Outcomes

Another problem with mobility rankings is that the Opportunity Insights data are not detailed enough to observe outcomes at more than one in five institutions of higher education, including 12 state flagship universities such as Louisiana State University and the University of Colorado Boulder. These institutions have their results merged with other institutions (in some cases over a dozen). This is because Opportunity Insights primarily relies on tax forms submitted by institutions to link students with the college they attend. But some institutions do not specify an *individual* campus on the form; instead, they report the college or university *system* to which they belong. That method arbitrarily limits which colleges can compete.

The Opportunity Insights data are beholden to this limitation in reporting their mobility statistics, and the researchers simply follow the tax reporting method of each university system. For example, each college in Wisconsin's public university system lists "the University of Wisconsin System" and are reported as one institution in the Opportunity Insights dataset.[30]

Overall, approximately 350,000 students in the Opportunity Insights dataset were enrolled at more than 340 institutions that could not be directly observed due to these administrative groupings, which is more than 20 percent of the entire sample of institutions.[31] This means the ranking system has effectively excluded one in five institutions. In some groupings, two-year and four-year institutions are averaged together, even though these colleges often offer different credentials that lead to jobs with different incomes.[32] Table 3 presents a selected list of major university systems where college outcomes are reported as a single administrative unit.

There is little reason to think that institutions in the same university system produce similar mobility outcomes given that institutions in the same system can differ considerably in selectivity, quality, and the types of programs they offer. That is evident in the Opportunity Insights data when institutions in systems are reported separately. More importantly for comparing mobility rankings, different institutions in the same system can produce very different student outcomes.

Consider outcomes at the University of Illinois at Urbana–Champaign, the flagship institution, and other campuses in the University of Illinois system. The University of Illinois at Urbana–Champaign has a high graduation rate of 86 percent, and median starting incomes of former students range between $17,000 and $92,000.[33] This is markedly different than outcomes at the University of Illinois Springfield, which has a graduation rate of 56 percent and starting incomes between $27,000 and $57,000.[34] Despite these differences, the Opportunity Insights data list a single mobility rate for the entire Illinois system. There is no way to compare whether or how much each institution differs with respect to mobility.

This creates an uneven playing field for ranking institutions. Colleges that opted to report their system's name on a tax form, rather than their own campus, are effectively disqualified from scoring highly in Chetty et al.'s rankings. Specific institutions that may offer high levels of mobility cannot be identified if the college is presented in a grouping. In fact, when mobility outcomes are averaged across systems, the results tend to mirror the national average for four-year institutions.[35]

Mobility Definitions Matter

A final caution about mobility rankings is the sensitivity of the researchers' definition of mobility to different (yet reasonable) ways of defining it. Prior research has detailed the many ways to measure mobility, and none of them are necessarily better or worse than Chetty et al.'s definition.[36] The issue, as Chetty and his team acknowledge, is that even slight changes in the definition can lead to vastly different mobility rates for the same institution. That sets high stakes for whatever mobility definition researchers, journalists, or policymakers choose. It also suggests that there may not be an ideal way of ranking colleges in terms of mobility.

We illustrate this dynamic by comparing Chetty et al.'s definition of mobility to another definition. Recall that Chetty et al. define mobility rates as the product of an institution's access (the share of student enrollment from the bottom income quintile) and success (how many low-income students move from the bottom to top income quintile).[37] This methodology makes intuitive sense: It rewards institutions that move students from the lowest income levels to the highest and weights those results by the share of low-income students an institution enrolls. But Chetty et al.'s metric evaluates mobility for only a small share of all college students. Approximately 200,000 students in the Opportunity Insights dataset originated in the bottom income quintile, which is 11 percent of all students in the dataset.[38]

The issue, as Chetty and his team acknowledge, is that even slight changes in the definition can lead to vastly different mobility rates for the same institution.

Another group of researchers, Lorelle Espinosa, Robert Kelchen, and Morgan Taylor, creates a separate definition of mobility, which uses wider income targets to measure access and success.[39] Specifically, their definition counts mobility as moving from the bottom *two* income quintiles to the top *two* income quintiles.[40] This gives institutions credit for promoting mobility in a broader sense.

Consider a college where many students come from households earning $40,000 and end up earning $50,000 or more by the time they reach their early 30s. The Chetty et al. definition would not credit these students in the college's mobility rate, since it includes only students who begin in households earning less than $24,600 (the bottom income quintile *for parents*) and go on to earn more than $55,800 (the highest income quintile *for students*). Espinosa, Kelchen, and Taylor, however, treat this as a successful mobility outcome.

New York University (NYU) provides a useful case study. It ranks 95th under Chetty et al.'s definition of mobility, but under the methodology used by Espinosa, Kelchen, and Taylor, it does not make the top 500. What explains the vastly different rankings? It is actually quite technical, which is part of the overall problem with mobility rankings. The drop in rankings occurs not because NYU suddenly promotes less mobility under Espinosa,

Kelchen, and Taylor's definition; it is simply that hundreds of other institutions promote even more mobility than NYU when mobility is defined using Espinosa, Kelchen, and Taylor's broader income targets. Said differently, NYU promotes high levels of mobility for students starting in the bottom income quintile but does relatively less well for students starting in the second income quintile.

Overall, we find that nearly a quarter of all colleges move up or down by more than 300 places among the 1,297 institutions ranked under the two different mobility definitions. Community colleges tend to make some of the largest moves because they are less likely to succeed at moving low-income students to the *highest* income quintile, but they do a better job moving low-income students into the fourth income quintile (students who go on to have earnings between $35,200 and $55,800). To be sure, about half of colleges in the Opportunity Insights data move fewer than 20 places between the two definitions, suggesting that the definition is about as likely to be stable for an institution as it is not.

High-Mobility Institutions in States with Less Income Inequality

In this section, we return to the four institutions that are among the 100 highest-mobility institutions but located in states with lower levels of income inequality, as shown in Table 2. The Hoxby-Turner critique suggests that these institutions face headwinds in enrolling a high proportion of low-income students and moving them to the top income quintile after they leave. With less income disparity in these areas, there may be fewer low-income residents or fewer job opportunities with salaries in the top income quintile nationally. That these institutions achieve high rates of mobility according to Chetty et al.'s mobility definition, despite these conditions, makes them notable outliers. They may even be the true "engines of upward mobility" Chetty et al. aimed to identify. The institutions are Triangle Tech in Pittsburgh, Pennsylvania; Dickinson State University in Dickinson, North Dakota; Park University in Kansas City, Missouri; and University of Maryland University College (UMUC), which was renamed University of Maryland Global Campus in 2019.

These colleges' largest programs appear to be well aligned with career occupations in the labor market, which might help explain high mobility rates among their students. For example, Triangle Tech's most popular programs include welding, electrical and construction technologies, and carpentry. At Park University, more than 60 percent of undergraduates received degrees in business or marketing programs.[41] Dickinson State's largest programs include education, business, and marketing. UMUC, however, is a notable exception to this pattern. Many students major in interdisciplinary studies, which are not tied to a specific occupation in the labor market.[42]

While these institutions tend to offer career-focused programs, they differ significantly in other ways, particularly with student outcomes. More than 80 percent of students at Triangle Tech graduate, yet only 26 percent and 13 percent graduate at Dickinson State University and UMUC, respectively, although these graduation rates may be unreliable for UMUC.[43] Yet all these colleges score well using the Chetty et al. mobility definition because they still manage to move between 20 percent and 30 percent of their low-income students to the top national income quintile.

That raises an important issue. Traditional measures of student outcomes and college quality such as graduation rates seem to offer little predictive power when it comes to mobility. UMUC and Dickinson State University demonstrate that some institutions provide large economic returns for many of their low-income students—at least according to Chetty et al.'s mobility definition—despite having low graduation rates. Advocates and policymakers who assume graduation rates are a proxy for mobility may want to reconsider their position. Or perhaps it is the Chetty et al. mobility rankings that are flashing the false signal.

Finally, these four institutions may also benefit from factors outside their immediate control in achieving high mobility rates. Triangle Tech, Park University, and UMUC are all in major metropolitan areas. These cities—Pittsburgh, Kansas City, and Washington, DC, respectively—each possess high levels of income disparity and growing labor markets. Both of these features may contribute to the supply of low-income students who enroll at

these colleges and the mobility students experience afterward. In that regard, it is surprising that Dickinson State University achieves such high mobility rates without a nearby metropolitan area.[44]

Conclusion

Researchers, policymakers, and the public are increasingly interested in judging colleges and universities on measures beyond selectivity and prestige. When Opportunity Insights, led by Chetty, compiled the first-ever dataset to highlight colleges that are the best at promoting economic mobility among students, these groups embraced the new information with enthusiasm. But a few researchers, such as Hoxby and Turner, urged caution.

They noted that judging individual colleges on one-size-fits-all economic mobility measures lacked context, such that colleges might achieve high mobility scores by virtue of their location, not their quality. Specifically, institutions in areas with large populations of low-income students and proximity to high-income labor markets would automatically appear better at promoting mobility than institutions not in such locations, even if they are otherwise similar.

We tested this critique using the Opportunity Insights data and find that the highest-mobility institutions are indeed concentrated in states and cities that exhibit the most income inequality. Conversely, states with little income inequality are home to few if any high-mobility institutions. But we are careful not to downplay the value of economic mobility per se. The education that high-mobility institutions provide is surely a major factor in moving students up the income ladder. But that effect could stem from the value of a college education generically, rather than the fact that it was provided by a particular institution, as mobility rankings imply.

Our analysis of the Opportunity Insights data raises additional concerns about Chetty et al.'s rankings and ranking institutions of higher education on mobility generally. While most observers interpreted the rankings to be inclusive of all institutions and an apples-to-apples comparison of mobility data, in reality, they assigned averaged scores for hundreds of colleges and universities because they file IRS tax forms as part of a system, not as individual institutions. And Chetty et al.'s ranking system is sensitive to different—and completely defensible—definitions of mobility. Many of the top-performing institutions fall hundreds of places in the rankings when we applied other researchers' definition of mobility and compared it to the Chetty et al. rankings.

These findings suggest that observers should approach economic mobility rankings of colleges and universities with more caution and scrutiny than they have thus far. There is growing evidence that economic mobility rankings are a far less reliable measure of relative college quality and value than is commonly understood.

About the Authors

Jason D. Delisle is a resident fellow at the American Enterprise Institute.

Cody Christensen is a research associate at the American Enterprise Institute.

Acknowledgments

The authors thank Sarah Turner (University of Virginia) and Robert Kelchen (Seton Hall University) for their thoughtful comments and review of this report. The authors also thank Aleida Baumgartner, Grace Heller, and Warner Radliff for their helpful research assistance. Of course, the views expressed are those of the authors, and they take full responsibility for any errors that remain.

Appendix A

Table A1. State Income Inequality Ranking and State Income Inequality Quintile

State	Gini	Income Inequality Rank	Quint.	State	Gini	Income Inequality Rank	Quint.
District of Columbia	53.99%	1	5	Ohio	44.70%	27	3
New York	49.69%	2	5	Rhode Island	44.63%	28	3
Connecticut	48.03%	3	5	Oregon	44.51%	29	3
Louisiana	47.58%	4	5	Michigan	44.50%	30	3
Texas	47.38%	5	5	Washington	44.37%	31	2
Mississippi	47.21%	6	5	Kansas	44.10%	32	2
Alabama	47.17%	7	5	South Dakota	43.64%	33	2
Tennessee	46.77%	8	5	Maryland	43.60%	34	2
California	46.75%	9	5	Nevada	43.57%	35	2
Florida	46.73%	10	5	North Dakota	43.47%	36	2
Illinois	46.28%	11	4	Delaware	43.29%	37	2
Massachusetts	46.26%	12	4	Hawaii	43.28%	38	2
Georgia	46.11%	13	4	Maine	43.17%	39	2
South Carolina	46.06%	14	4	Minnesota	43.08%	40	2
Oklahoma	46.04%	15 (Tied)	4	Indiana	43.06%	41	1
Kentucky	46.04%	15 (Tied)	4	Montana	43.05%	42	1
North Carolina	45.97%	17	4	Nebraska	42.91%	43	1
New Jersey	45.94%	18	4	Wisconsin	42.87%	44	1
Arkansas	45.90%	19	4	Vermont	42.43%	45	1
New Mexico	45.81%	20	4	Idaho	42.42%	46	1
Pennsylvania	45.54%	21	3	Iowa	42.36%	47	1
Virginia	45.52%	22	3	Wyoming	41.74%	48	1
Arizona	45.23%	23	3	Alaska	41.67%	49	1
West Virginia	45.02%	24	3	New Hampshire	41.61%	50	1
Colorado	44.95%	25	3	Utah	41.01%	51	1
Missouri	44.90%	26	3				

Note: Gini coefficients are calculated using a two-year averages for 2006 and 2007, which corresponds with the approximate time that students in the first three Opportunity Insights birth cohorts enter the labor market. All 50 states and the District of Columbia are then divided into quintiles (with 11 states in the bottom quintile) based on this measure.
Source: Authors' calculations using US Census Bureau data.

Notes

1. Rachel Fishman et al., *Varying Degrees 2019*, New America, September 2019, https://d1y8sb8igg2f8e.cloudfront.net/documents/Varying_Degrees_2019_2019-09-11_202908.pdf.

2. *US News & World Report*, "Top Performers on Social Mobility," www.usnews.com/best-colleges/rankings/regional-universities-north/social-mobility.

3. Chris Coons and Johnny Isakson, "Access, Success, and Persistence in Reshaping Education (ASPIRE) Act," US Senate, November 2017, https://www.coons.senate.gov/imo/media/doc/ASPIRE%20Act%20One-Pager%20Nov%202017%5B1%5D%5B2%5D.pdf; College for All Act of 2019, H.R. 3472, 116th Cong., 1st sess., www.congress.gov/bill/116th-congress/house-bill/3472/text; and Debt-Free College Act of 2019, S. 672, 116th Cong., 1st sess., www.congress.gov/bill/116th-congress/senate-bill/672/text.

4. In 2015, the Department of Education redesigned the College Scorecard, which publicized the average earnings of former graduates at each college. In 2019, it expanded the College Scorecard to disaggregate that information at the program level. For more information, see US Department of Education, "Fact Sheet: Obama Administration Announces Release of New Scorecard Data," press release, September 14, 2016, www.ed.gov/news/press-releases/fact-sheet-obama-administration-announces-release-new-scorecard-data; and US Department of Education, "Secretary DeVos Delivers on Promise to Expand College Scorecard, Provide Meaningful Information to Students on Education Options and Outcomes," press release, May 21, 2019, www.ed.gov/news/press-releases/secretary-devos-delivers-promise-expand-college-scorecard-provide-meaningful-information-students-education-options-and-outcomes.

5. While some federal datasets provided information on student earnings, they do not track where students *started* or *ended* on the income distribution. Without that key detail, researchers have been unable to identify if students move to higher income quintiles after attending college. They can only measure if college students earn more or less than other groups. One exception are the data in the College Scorecard, which provide average earnings disaggregated by students' family income reported on the student's Free Application for Federal Student Aid. But these data include only students who apply for and receive federal financial aid, making it much more limited than the information available in the Opportunity Insights dataset. Additionally, the College Scorecard data are limited by a large number of privacy suppressions for small cohorts, and the data are available for only a handful of academic years. In several recent years, the data are missing altogether.

6. Raj Chetty et al., "Mobility Report Cards: The Role of Colleges in Intergenerational Mobility" (working paper, National Bureau of Economic Research, Cambridge, MA, July 2017), www.nber.org/papers/w23618.pdf. Opportunity Insights was formerly known as the Equality of Opportunity Project. Throughout this report, we refer to the organization by its current name, although Chetty et al. published their initial report when the organization was named the Equality of Opportunity Project.

7. In February 2020, Opportunity Insights expanded its dataset by combining it with detailed academic information from the College Board, which includes student-level SAT or ACT scores. For more information, see Chetty et al., "Mobility Report Cards"; and Raj Chetty et al., "Income Segregation and Intergenerational Mobility Across Colleges in the United States" (working paper, February 2020), https://opportunityinsights.org/wp-content/uploads/2020/02/coll_mrc_qje_paper.pdf.

8. In February 2020, Chetty et al. updated their top 10 list to exclude institutions that had closed as of September 2019. This removed Technical Career Institutes from the top 10 list, which closed in 2017, and added St. John's University–Queens. Chetty et al., "Income Segregation and Intergenerational Mobility Across Colleges in the United States."

9. For examples of this, see Dewayne Matthews, "Does Higher Education Really Increase Economic Mobility?," Lumina Foundation, April 10, 2017, www.luminafoundation.org/news-and-views/does-higher-education-really-increase-economic-mobility; Michael Lawrence Collins, "New Data Can Help Increase Low Income Students' Economic Mobility," Inside Higher Ed, August 1, 2017, www.insidehighered.com/views/2017/08/01/new-data-can-help-increase-low-income-students-economic-mobility-essay; Louis Menand, "Is Meritocracy Making Everyone Miserable?," *New Yorker*, September 23, 2019, www.newyorker.com/magazine/2019/09/30/is-meritocracy-making-everyone-miserable; and Gwynn Guilford, "These Universities Are America's Engines of Upward Mobility—and They're Sputtering," Quartz, July 25, 2017, https://qz.com/1037128/these-universities-are-the-americas-engines-of-upward-mobility-and-theyre-sputtering/.

10. Chetty et al., "Mobility Report Cards," 3.

11. The Opportunity Insights dataset includes the universe of all tax filers who attended college and were born between 1980 and 1991, which includes roughly 48 million records. Opportunity Insights excludes individuals without valid Social Security numbers, along with students from families with negative income levels. The sample is also restricted to dependent students who attended college immediately after high school, usually between the ages of 19 and 22. To ensure that students in each birth cohort are roughly the same age, independent students and dependent students who started college after age 22 are excluded. After imposing these restrictions and omitting observations with incomplete data, roughly 28.1 million students remain in the sample. Parental income used is a five-year smoothed average of household income between when the child was 15 and 19. For more information on Opportunity Insights' methodology, see Chetty et al., "Mobility Report Cards."

12. The data for the analysis in this report include 1,297 institutions, which encompasses all public, nonprofit, and for-profit institutions in the Opportunity Insights dataset. This includes both two- and four-year institutions. We follow Chetty et al.'s methodology by excluding 494 small institutions (those that enroll fewer than 300 students), and we also exclude 85 institutions that offer exclusively programs less than two years in length. The dataset excludes institutions with insufficient data, which is typically due to the small number of students who attended the institution, as determined by Opportunity Insights.

13. Colleges and universities file the 1098-T to the IRS for each tuition-paying student enrolled at the institution. As Chetty et al. note, not all students pay tuition expenses, meaning there is not always a 1098-T for each student. Therefore, Opportunity Insights supplements the tax data from the IRS with individual Pell Grant records from the National Student Loan Data System, proving a near-comprehensive roster of attendance at all Title IV–accredited institutions.

14. Opportunity Insight assigns students into income percentiles based on their 2014 individual earnings, gathered from federal tax data. The sample includes all US citizens or legal immigrants born in the US (or those who moved to the US as children) and whose parents had nonnegative incomes when the student matriculated in college. The income distribution of students is relative to individuals in their early 30s, who were born in the 1980, 1981, or 1982 birth cohorts. For more information, see the sample definition in Chetty et al., "Income Segregation and Intergenerational Mobility Across Colleges in the United States."

15. The highest-performing colleges in Opportunity Insights' dataset have mobility rates near 10 percent. This is because they either enroll a disproportionately large share of low-income students or do better than expected in moving low-income students to the highest income quintile. For example, 33.1 percent of students at California State University, Los Angeles, come from families in the bottom income quintile, and of those students, 29.9 percent of them move to the highest income quintile. Accordingly, the school has a mobility rate of 9.9 percent. Institutions receive credit for successfully improving the economic mobility of a student only if the student originates from a household earning less than $24,600 (the bottom income quintile *for parents*) and then earns more than $55,800 (the top income quintile *for students*) by the time the student is in his or her early 30s, in constant 2015 dollars.

16. We define "top mobility institutions" as the 100 institutions with the highest mobility rates in the Opportunity Insights dataset for the 1980–82 birth cohorts. In counting these top 100 institutions, City University of New York (CUNY) institutions are counted individually (rather than as a collapsed average) as they originally appear in the Opportunity Insights dataset.

17. Caroline M. Hoxby and Sarah Turner, "Measuring Opportunity in U.S. Higher Education" (working paper, National Bureau of Economic Research, Cambridge, MA, January 2019), www.nber.org/papers/w25479.

18. Hoxby and Turner illustrate that several state flagship institutions would appear to under-enroll low-income students even if those colleges admitted *every* eligible low-income student in their state.

19. In 2016, only 12 percent of college-educated young adults moved to a different state. The majority of college graduates remain in the state in which they received their degree in the years immediately following their graduation. This suggests that college graduates often remain in their local labor market after receiving a college degree, at least in the initial year after leaving college. For more information, see Robert Kelchen and Douglas A. Webber, "Examining the Interstate Mobility of Recent College Graduates," *Educational Researcher* 47, no. 3 (January 2018), https://doi.org/10.3102/0013189X17753124.

20. Importantly, Hoxby and Turner do not re-rank institutions based on their findings. Instead, their analysis focuses on the conceptual problems of measuring mobility.

21. For examples of this, see Jill Barshay, "These Colleges Turn Low-Income Students into Middle-Class Earners—But How?," Hechinger Report, February 5, 2018, https://hechingerreport.org/one-college-system-pushes-many-graduates-middle-class-beyond/; and Karin Fischer, "The Barriers to Mobility: Why Higher Ed's Promise Remains Unfulfilled," *Chronicle of Higher Education*, December 31, 2019, www.chronicle.com/interactives/20191231-barriers-to-mobility.

22. For more information on this topic, see John V. Winters, "What You Make Depends on Where You Live: College Earnings Across States and Metropolitan Areas," Fordham Institute, May 19, 2020, https://fordhaminstitute.org/national/research/what-you-make-depends-on-where-you-live.

23. Consider Career Technical Institute, the fourth-highest-ranked college by Chetty et al. Less than a quarter of students who attend this college graduate, and more than a third of student borrowers defaulted on their loans. The institution ultimately closed in 2019 due to financial issues, highlighting that rankings are not necessarily correlated with typical measures of institutional quality.

24. These areas have some of the highest levels of income inequality in the country. For more information, see Alan Berube, "City and Metropolitan Income Inequality Data Reveal Ups and Downs Through 2016," Brookings Institution, February 5, 2018, www.brookings.edu/research/city-and-metropolitan-income-inequality-data-reveal-ups-and-downs-through-2016/; and Jaison R. Abel and Richard Deitz, "Why Are Some Places So Much More Unequal Than Others?," Federal Reserve Bank of New York, December 2019, www.newyorkfed.org/medialibrary/media/research/epr/2019/epr_2019_wage-inequality_abel-deitz.pdf.

25. The range in mobility rates across CUNY institutions is between 5 percent (Kingsborough Community College) and 10 percent (Baruch College). This is a substantial gap given that the average mobility rate for all institutions in the dataset is 1.9 percent and the standard deviation is 1.3 percent.

26. We present the CUNY institutions individually for several reasons. First, that is how they originally appear in the Opportunity Insights dataset; that is, CUNY institutions report mobility outcomes at each individual campus, not as an administrative grouping

like other university systems. Second, CUNY institutions report campus-level information to both the Integrated Postsecondary Education Data System and the College Scorecard, which illustrates that there is variability among campuses across a variety of demographic characteristics and student outcomes. Third, they differ in institutional level: Some CUNY colleges are four-year institutions, while others are strictly two-year colleges.

27. The lowest-performing CUNY community college, Kingsborough Community College, has a mobility rate of 5.0 percent. The best-performing state flagship is the University of California, Berkeley, which has a mobility rate of 4.9 percent. The Opportunity Insights dataset includes 30 state flagship institutions. (The others are not individually observable because they are presented as a system of schools.)

28. For the years in our analysis (corresponding with the 1980–82 birth cohorts), California contained 8.5 percent of all colleges, New York contained 8.6 percent of all colleges, and Texas contained 6.4 percent of all colleges.

29. We tested our findings using several different definitions of income inequality (including the Gini coefficient and the ratio of a state population's 80th income percentile to its 20th income percentile), and our findings are generally consistent across both measures.

30. The University of Wisconsin System, as grouped by Opportunity Insights, includes a combination of two- and four-year institutions. In the Opportunity Insights crosswalk of colleges to institutional groupings (Table 11), there are 16 institutions in the grouping, 14 of which are labeled with institution names, and the other two are unlabeled. For more information, see Chetty et al., "Mobility Report Cards," Table 11.

31. The Opportunity Insights data present more than 340 individual campuses as 65 administrative groupings because of how these institution filed their tax data with the IRS. Chetty et al. acknowledge that the administrative groupings make up 3.9 percent of colleges in the data, which treats each grouping as an individual observation in the data even though these administrative groupings represent multiple institutions. The entire thrust of the Opportunity Insights data is to rank individual colleges; therefore, if one weights these administrative groupings by the number of individual colleges they represent, the administrative groupings would account for more than 20 percent of colleges in the sample. When tallying individual colleges in groupings, we count any institution listed with an Office of Postsecondary Education Identification number as an institution in the larger grouping. This means that some institutions are unnamed in the Opportunity Insights dataset, which is either due to college closures, consolidations, or administrative changes. Opportunity Insights states that some of these unlabeled institutions are included in the dataset for historical purposes. Our data include 65 administrative groupings (rather than 85, as Chetty et al. indicate) from the 1980–82 birth cohorts. Administrative groupings that did not have enrollment data (or had fewer than 300 students enrolled) during these years were excluded.

32. Researchers have highlighted several of the administrative groupings in which seemingly unlike colleges are lumped together. For example, Robert Kelchen (2017) calls attention to the following pairings due to their vague and nondescript names: "The University of Maryland System (Except University College) and Baltimore City Community College," "Minnesota State University System, Century and Various Other Minnesota Community Colleges," and "Certain Colorado Community Colleges." But another consequence of relying on administrative data sources is that, in some cases, two- and four-years institutions are combined and mobility outcomes are presented as a single average. This is often apparent by the name of the institutional grouping (e.g., "The University of Hawaii and Hawaii Community Colleges"), but in other cases this is not immediately transparent. For example, the grouping labeled "University of South Carolina System" includes five four-year universities and three two-year colleges. In total, the Opportunity Insights dataset contains eight groupings in which two- and four-year institutions are averaged together, yet it is not always evident by the grouping's name that this is the case.

33. US Department of Education, "College Scorecard," https://collegescorecard.ed.gov/.

34. US Department of Education, "College Scorecard."

35. Four-year colleges that report mobility outcomes individually and four-year colleges within institutional groupings show an average mobility rate of 2.1 percent (n = 755) and 2.2 percent (n = 31), respectively.

36. Pamela L. Eddy and Richard M. Romano, "Social Mobility: Can Community Colleges Make a Difference?" (working paper), www.wm.edu/sites/socialmobility/_documents/session_v_eddy_romano_paper.pdf.

37. Chetty et al. include a second set of rankings in their report, in which success is defined as the share of students moving from the bottom 20 percent of the income distribution to the top 1 percent (which Chetty et al. refer to as the "upper-tail mobility rate"). In this ranking, several Ivy League schools and other elite institutions (including the Massachusetts Institute of Technology, Stanford, University of Pennsylvania, and Johns Hopkins) rise to the top 10.

38. Chetty et al. find that their measures of access and success are inversely correlated, suggesting that many institutions that move many low-income students up the income ladder ("success") do not serve a large share of low-income students. Institutions that rank the highest under the Chetty et al. definition are those that do relatively well on both measures of access and success. With few exceptions, institutions that perform well on only one of these measures do not score highly under this definition.

39. Lorelle L. Espinosa, Robert Kelchen, and Morgan Taylor, "Minority Serving Institutions as Engines of Upward Mobility," American Council on Education, 2018, https://www.acenet.edu/Documents/MSIs-as-Engines-of-Upward-Mobility.pdf.

40. In constant 2015 dollars, this includes students who start college from families earning less than $45,800 and then go on to have individual earnings above $35,200 by the time they reach their early 30s. See Chetty et al., "Income Segregation and Intergenerational Mobility Across Colleges in the United States," Table 1.

41. US Department of Education, Integrated Postsecondary Education Data System, 2000–02.

42. Of full-time, first-time students at University of Maryland University College (UMUC), approximately 60 percent of degrees awarded were in interdisciplinary studies in the 2000–02 academic years, although full-time, first-time students make up only a tiny fraction of UMUC's total enrollment.

43. Graduation rates apply to full-time, first-time students only. This makes up a tiny share of total enrollment at UMUC. For more information, see US Department of Education, Integrated Postsecondary Education Data System, 2000–02.

44. A 2013 state audit found that Dickinson State University awarded more than 500 fraudulent degrees to foreign students who had not met necessary course requirements. It is unclear the extent to which the fraud influenced the college's level of success (foreign students are excluded from the Educational Opportunity Program dataset), but caution is in order before concluding that there is anything "special" about this institution. Dickinson State University is not near any other metropolitan area. The nearest city is Bismarck, North Dakota, which is approximately 100 miles away from Dickinson, North Dakota. Minneapolis, Minneapolis, is over 500 miles away.