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# Opportunity Lost:

## Net Price and Equity at Public Flagship Institutions

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## EXECUTIVE SUMMARY

While the best path to economic mobility is still a college degree, higher education remains unaffordable for many of those who could benefit the most.<sup>1</sup> America's public flagship institutions hold enormous potential for offering an affordable pathway to a high-quality bachelor's degree. However, our analysis of the net price at these institutions for different types of students finds that many flagships are failing to live up to this promise. Using output from institutional net price calculators for first-year students from different socioeconomic backgrounds and comparing these prices to how much students and their families can afford, we find enormous gaps in affordability for all but the wealthiest students.

Our findings include:

- ▶ **Most flagship institutions are not affordable for most students.** Only 6 out of 50 flagship institutions meet an affordability benchmark for students who are not from high-income backgrounds. All 50 institutions are easily affordable for a typical high-income student.
- ▶ **Unmet need can put vulnerable students in a massive financial hole.** At some flagships, students from economically disadvantaged backgrounds may need to cover over \$80,000 beyond what they can afford over four years—assuming they attend full-time and complete their degree on-time.
- ▶ **At many of the most affordable institutions, access remains a problem for students from low-income backgrounds.** Of the top five most affordable institutions for low-income students, three are in the bottom five for low-income student enrollment.
- ▶ **Many states and institutions provide large grants to students who can already afford college.** At 34 flagships, the state or institution provides financial aid to a typical high-income student who comes from a household earning more than \$167,000 per year. Nearly one-third of these provide \$5,000 or more in aid per year to a typical high-income student. At six institutions, high-income aid outstrips low-income unmet need for the students in this analysis.

Institutions and states share the responsibility for these patterns. While declines in per-student state appropriations have pushed publicly funded institutions to do more with less, strategies to offset cuts should avoid placing an undue financial burden on low-income students. By reinvesting in public support for higher education, state legislators can ease the burden on institutions to provide high-quality affordable opportunities for state residents. At the same time, institutions can better prioritize low-income students

within their admissions, pricing, and financial aid strategies. Specifically, state legislators and institutional leaders should both work to make flagships more affordable, more accessible, and more equitable. The following solutions can aid in restoring these public institutions to their original mission:

**1 Award state and institutional aid based primarily on student need.** The federal Pell Grant provides support for low-income students to attend college, but the purchasing power of the Pell Grant has fallen over time. States and institutions should emphasize student need in determining financial aid awards to students, so that these dollars supplement federal investments in need-based aid, rather than awarding funds to students who can afford college without additional financial support.

**2 Design need-based aid programs to cover the total cost of college, instead of just tuition.** Living costs and other non-tuition expenses present major barriers to students pursuing higher education. Ensuring that institutional, state, and federal dollars are available to support non-tuition expenses would provide much needed support to students struggling to make ends meet.

**3 Restore and increase general appropriations to all public institutions.** State legislators can improve access, affordability, and equity in their public colleges and universities by allocating financial resources commensurate with the level of need of the students served. These appropriations should be used to lower tuition charges for students.

**4 Prioritize access for low-income students at public flagship institutions.** Public flagship institutions should work to actively recruit low-income state residents and review existing admissions and aid allocation practices to ensure equitable opportunities exist regardless of a student's socioeconomic background. At a minimum, flagship institutions should strive to close equity gaps in access to higher education in their states by aiming to enroll a share of Pell students proportionate to the overall share of Pell enrollment in their state.

**5 Design and implement a federal-state partnership to encourage states and institutions to prioritize high-quality, affordable, accessible higher education options for all students.** State disinvestment in higher education has amplified affordability problems at public institutions, including flagships, but especially at less selective, historically under-resourced institutions like community colleges. Policymakers should leverage federal funding to encourage states to invest in higher education, maintain low-costs to students, and commit to high-quality educational offerings.

## INTRODUCTION

The promise of the American Dream runs through the nation's college campuses. America's public flagship institutions represent the pinnacle of that promise, holding enormous potential to provide accessible and affordable pathways to high-quality bachelor's degree. Yet too few flagships are fully living up to this potential.

Flagship institutions are broadly and colloquially known by state residents and tend to be the most selective, academically rigorous, and well-resourced public school in each state. Flagships receive nearly 40 percent more state appropriations per full-time undergraduate student than other public four-year institutions.<sup>2</sup> Because of this taxpayer support, flagships are typically expected to prioritize serving state residents. High-achieving students from all backgrounds deserve the chance to attend the most well-resourced and academically rigorous environments where they can thrive, regardless of their families' abilities to pay. Evidence suggests that students who attend these selective universities have better completion rates and better economic outcomes than students who attend less selective institutions.<sup>3</sup> As a result, flagships can be great equalizers, yet this analysis finds that many flagships have

not fully realized that potential and, instead, cost too much and provide too little aid to be affordable for low-income students.

Part of the blame for this unaffordability lies with state legislators: in the face of competing priorities,

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most states have cut their budgets for public higher education, exacerbating institutions' reliance on tuition revenue and limiting their ability to meet students' full need. Forty-one out of 50 states provide less in general appropriations per student than they did at the beginning of the Great Recession.<sup>4</sup>

Making matters worse, many state-funded financial aid programs have reduced their commitment to need-based aid,<sup>5</sup> awarding at least some of their grants and scholarships based on test scores or other measures of academic preparation. The result is that many high-income students receive state financial aid—while structural inequities in the K-12 and college preparatory systems mean that low-income students are less likely to qualify. Against high-tuition prices and reduced need-based aid programs, federal grants, like the Pell Grant, are insufficient to close the gap and make public flagships affordable for low-income students.<sup>6</sup>

However, institutions hold responsibility too. Instead of seeking creative solutions to keep prices down in an era of reduced state appropriations, evidence suggests that institutions are prioritizing recruitment of wealthier students who can afford more in tuition to make up the difference. Many of these students come from outside the state and pay higher tuition rates, further padding the institution's bottom line.

The result is that flagship institutions often provide institutional aid to students without financial need even when these dollars could make a much bigger impact for a student with high unmet need.<sup>7</sup> In a higher education system in which resources are limited, states and institutions that award scholarships without regard to student need exacerbate the affordability barriers for those who could benefit the most from additional financial support.

To better understand the prices students and their families must pay to attend public flagships, this report draws on data from each institution's net price calculator for five typical college students from different socioeconomic backgrounds.<sup>8</sup> To improve the reliability of this data, we provided the institutional research and financial aid offices of each university an opportunity to review and offer corrections to the outputs from their calculators.<sup>9</sup> We then compare these net prices with a benchmark designed to measure college affordability (see “**Evaluating affordability**” on page 6).

The results paint a stark picture: one in which the vast majority of public flagships are affordable for only the wealthiest students, and where a typical first-year student from a low-income background is left with tens of thousands of dollars of unmet need at many flagships. A few states and institutions break from these troubling patterns, ensuring little to no unmet need among low-income students.

## Meet the Students

Using nationally representative data, we generated demographic and academic profiles for five students from a range of socioeconomic backgrounds. Students are assumed to attend school full-time, be in their first year, and attend college in their home state.

### Dependent Students:



19 years old  
Lives with one parent and two younger siblings  
Family income (AGI): \$13,825  
First-generation college student  
\$0 estimated Federal EFC  
GPA: 3.8; ACT composite score: 24; SAT composite score: 1100



19 years old  
Lives with both parents and one younger sibling  
Family income (AGI): \$62,056  
One parent has an associate degree, the other parent has some college  
\$5,757 estimated Federal EFC  
GPA: 3.9; ACT composite score: 26; SAT composite score: 1180



19 years old  
Lives with both parents and one younger sibling  
Family income (AGI): \$167,387  
Both parents hold bachelor's degrees  
\$22,329 estimated Federal EFC  
GPA: 3.9; ACT composite score: 28; SAT composite score: 1240

### Independent students:



24 years old  
Lives alone  
Personal income (AGI): \$13,957  
\$120 estimated Federal EFC  
ACT composite score: 23; SAT composite score: 1030



24 years old  
Lives with her two young children  
Personal income (AGI): \$23,893  
\$340 estimated Federal EFC  
ACT composite score: 23; SAT composite score: 1070

## FEW FLAGSHIPS ARE AFFORDABLE FOR ECONOMICALLY DISADVANTAGED STUDENTS

Measuring the affordability threshold against each student's estimated net price suggests that nearly all flagship institutions are financially out of reach for low-income and even middle-income students. Only four institutions out of 50—the **University of Arizona**, the **University of Michigan**, the **University of North Carolina-Chapel Hill**, and the **University of Wisconsin-Madison**—are affordable for Sonja—the low-income first-year student in our analysis (see **Table 1**). The **University of Virginia** comes close to being affordable—charging a net price only slightly above the affordability threshold (by \$375 annually), and it is the only institution in the country to meet the threshold for the middle-income student, Ava, as well. In contrast, all 50 flagship institutions in the nation are affordable for our high-income student, Maria, consistently with tens of thousands of dollars to spare.

### Pulling out the rug on students—bad practices in institutional and state aid policy

The **University of Arizona** meets the affordability benchmark for our low-income dependent, Sonja, in her first year of college because of the Arizona Assurance grant. This program offers \$2,000 per year for four years, and \$7,300 for housing *in the first year only*.<sup>10</sup> This sizeable grant is included on the institution's net price calculator with no caveats as to what students might pay in future years. While it is a positive step that the institution provides grant aid specifically for living costs, the temporary nature of this funding makes the institution appear more accessible to low-income students than it really is in subsequent years. By failing to note on the net price calculator the additional housing costs students will face over the remaining years of their education, the university is asking students to make decisions based on incomplete information. While Arizona is the only example of front-loaded scholarships in our study, this is not an uncommon phenomenon among other elite institutions.<sup>11</sup>

Other scholarships also carry uncertainty for low-income students by providing financial aid on a first-come, first-served basis with insufficient funding to support all eligible students. For instance, **Illinois'** Monetary Award Program (MAP)<sup>12</sup>, **Oregon's** Opportunity Grant<sup>13</sup>, and **Vermont's** Incentive Grant<sup>14</sup> all award grants annually until resources are depleted.

For independent students, who have a median income of about \$20,200, many flagship institutions are even less affordable. Only two states' flagships, **West Virginia** and **Wisconsin**, are affordable for Traval, our sample independent student without dependents. For the approximately one-in-four students who do have a child or other dependent at home, like Jin Sook, only three states have flagship institutions that are affordable: **Michigan**, **North Carolina**, and **West Virginia**.<sup>15</sup>

In contrast, in some states, such as **Alabama** or **Pennsylvania**, both independent students Traval and Jin Sook, would need to cover over \$80,000 in unmet financial need—assuming they attend full-time, complete college in four years, and that financial aid and pricing remain stable.

### Evaluating affordability

Differences in family and student resources mean that some students will easily cover college costs, while others will struggle to come up with the needed funds. When students do not have the resources to cover their unmet financial need, they may turn to student loans, putting them in a long-term financial hole. Others may forgo college altogether, while those who do enroll may select lower-cost schools with fewer resources, work long hours during school, stop in and out of school in order to accumulate savings, or sacrifice basic necessities like food and housing to make ends meet.<sup>16</sup> Unfortunately, many of these cost-saving strategies will ultimately reduce those students' odds of finishing their degrees.<sup>17</sup>

To determine whether each institution is affordable for each of our students, we apply Lumina Foundation's "Rule of 10" benchmark.<sup>18</sup> This standard stipulates that: 1) a family sets aside 10 percent of their discretionary income for 10 years, and 2) the student works 10 hours per week during college. If this combination of savings and work earnings—or an equivalent amount—can cover the net price of college for a four-year degree program, the institution is deemed to be affordable for that student.

Subtracting the affordability benchmark from each student's estimated net price illustrates whether they are left with unmet—or overmet—financial need. For a more detailed explanation of the affordability benchmark calculation, please see the Technical Appendix to this report.

#### Affordability Formula:

Household savings = 10% of discretionary income over 10 years  
Student earnings = 10 hours per week over four years  
Affordability benchmark = Household savings + Student earnings  
Affordability gap = Annual affordability benchmark - Net price

**TABLE 1: Affordability Gaps at Public Flagship Institutions by Student Characteristics**

Orange cells and negative numbers show that a student has unmet financial need—meaning that between family resources, student work, and grants and scholarships, they have insufficient funding to pay for college. Green cells and positive numbers show that a student has more than enough funding to afford the institution.

	INDEPENDENT STUDENTS		DEPENDENT STUDENTS		
	Traval (no Dependents)	Jin Sook (with Dependents)	Sonja (Low-income)	Ava (Middle-income)	Maria (High-income)
U. OF ALABAMA	-\$20,729	-\$20,929	-\$19,579	-\$21,856	\$15,789
U. OF ALASKA FAIRBANKS	-\$15,246	-\$15,246	-\$9,486	-\$10,316	\$39,139
U. OF ARIZONA	-\$10,877	-\$11,109	\$1,850	-\$7,367	\$28,689
U. OF ARKANSAS	-\$13,521	-\$14,463	-\$10,371	-\$14,732	\$19,137
U. OF CALIFORNIA-BERKELEY	-\$2,488	-\$2,203	-\$2,800	-\$951	\$29,798
U. OF COLORADO-BOULDER	-\$5,378	-\$5,378	-\$5,378	-\$13,927	\$23,192
U. OF CONNECTICUT	-\$9,859	-\$9,726	-\$9,962	-\$14,963	\$37,894
U. OF DELAWARE	-\$3,252	-\$3,485	-\$3,125	-\$5,006	\$21,860
U. OF FLORIDA	-\$2,325	-\$575	-\$7,023	-\$7,467	\$25,293
U. OF GEORGIA	-\$8,454	-\$8,454	-\$8,454	-\$10,655	\$24,737
U. OF HAWAII-MANOA	-\$12,548	-\$12,548	-\$12,548	-\$4,345	\$38,035
U. OF IDAHO	-\$11,660	-\$20,160	-\$8,700	-\$10,510	\$23,003
U. OF ILLINOIS-CHAMPAIGN URBANA	-\$8,973	-\$9,110	-\$8,898	-\$15,507	\$18,140
INDIANA UNIVERSITY BLOOMINGTON	-\$10,498	-\$9,908	-\$9,908	-\$8,312	\$15,941
U. OF IOWA	-\$14,408	-\$13,458	-\$14,256	-\$8,723	\$22,684
U. OF KANSAS	-\$13,224	-\$13,424	-\$10,593	-\$17,987	\$19,507
U. OF KENTUCKY	-\$17,362	-\$16,312	-\$15,662	-\$16,651	\$11,818
LOUISIANA STATE UNIVERSITY	-\$10,336	-\$8,486	-\$7,200	-\$13,837	\$18,627
U. OF MAINE	-\$9,857	-\$10,157	-\$9,707	-\$7,968	\$35,523
U. OF MARYLAND-COLLEGE PARK	-\$2,021	-\$2,021	-\$2,063	-\$6,518	\$37,411
U. OF MASSACHUSETTS-AMHERST	-\$9,092	-\$8,990	-\$9,151	-\$13,557	\$32,743
U. OF MICHIGAN	-\$3,405	\$2,225	\$2,225	-\$2,816	\$16,937
U. OF MINNESOTA	-\$8,533	-\$7,583	-\$7,583	-\$4,033	\$18,184
U. OF MISSISSIPPI	-\$3,551	-\$3,551	-\$3,551	-\$18,966	\$13,096
U. OF MISSOURI	-\$11,659	-\$11,659	-\$11,659	-\$11,232	\$16,840
U. OF MONTANA	-\$9,697	-\$9,897	-\$7,947	-\$10,491	\$27,066
U. OF NEBRASKA-LINCOLN	-\$8,230	-\$8,430	-\$10,030	-\$12,976	\$19,652
U. OF NEVADA-RENO	-\$8,642	-\$7,442	-\$7,442	-\$8,240	\$29,877
U. OF NEW HAMPSHIRE	-\$19,330	-\$16,430	-\$13,580	-\$13,208	\$26,358
RUTGERS UNIVERSITY	-\$21,420	-\$15,366	-\$10,713	-\$11,996	\$22,979
U. OF NEW MEXICO	-\$9,494	-\$7,144	-\$5,760	-\$4,593	\$31,310
UNIVERSITY AT BUFFALO	-\$7,160	-\$6,782	-\$5,444	-\$7,548	\$44,697
U. OF NORTH CAROLINA-CHAPEL HILL	-\$425	\$625	\$625	-\$3,523	\$19,028
U. OF NORTH DAKOTA	-\$7,919	-\$8,119	-\$11,543	-\$14,108	\$24,356
OHIO STATE UNIVERSITY	-\$10,074	-\$10,274	-\$9,324	-\$10,600	\$14,537
U. OF OKLAHOMA	-\$15,587	-\$15,787	-\$13,937	-\$18,725	\$15,982
U. OF OREGON	-\$9,955	-\$10,155	-\$10,092	-\$10,887	\$31,341
PENN STATE UNIVERSITY	-\$20,648	-\$20,848	-\$20,498	-\$23,044	\$13,601
U. OF RHODE ISLAND	-\$10,134	-\$10,134	-\$6,139	-\$10,216	\$33,336
U. OF SOUTH CAROLINA	-\$20,351	-\$19,201	-\$20,160	-\$19,958	\$14,958
U. OF SOUTH DAKOTA	-\$14,532	-\$12,882	-\$9,984	-\$12,536	\$26,210
U. OF TENNESSEE	-\$15,115	-\$15,315	-\$4,219	-\$12,230	\$25,156
U. OF TEXAS-AUSTIN	-\$16,599	-\$14,709	-\$6,749	-\$8,474	\$17,145
U. OF UTAH	-\$12,619	-\$13,449	-\$10,799	-\$14,388	\$23,320
U. OF VERMONT	-\$19,618	-\$19,918	-\$9,926	-\$8,988	\$29,614
U. OF VIRGINIA	-\$1,830	-\$13,149	-\$375	\$2,348	\$17,862
U. OF WASHINGTON	-\$5,125	-\$5,125	-\$5,125	-\$3,910	\$26,495
WEST VIRGINIA UNIVERSITY	\$1,004	\$804	-\$1,884	-\$6,767	\$28,202
U. OF WISCONSIN-MADISON	\$5	-\$215	\$125	-\$17,928	\$17,822
U. OF WYOMING	-\$6,396	-\$6,396	-\$6,396	-\$7,408	\$30,824

The affordable institutions take different approaches to college pricing. **North Carolina** has a relatively low cost of attendance at \$23,734, while **Michigan** and **Virginia** have some of the highest sticker prices in the nation among public flagships—\$32,224 and \$32,360, respectively. Still, each of these schools offers significant grant aid to low-income students:

- ▶ The **University of North Carolina** offers a promise program—The Carolina Covenant—a debt-free promise that uses grants, scholarships, and a work-study job to cover financial need, including living costs, for low-income students. Students in the Covenant program also receive academic and personal supports to encourage on-time graduation.<sup>19</sup>
- ▶ The **University of Michigan** offers the GoBlue Guarantee tuition-free promise program.<sup>20</sup> Alongside this guarantee, Michigan’s financial aid office highlights that it will cover 100% of demonstrated financial need for tuition expenses for Michigan residents.<sup>21</sup>
- ▶ While their net price calculator output does not individually specify each grant awarded, the **University of Virginia** leverages Virginia’s statewide Guaranteed Assistance Program (VGAP), which is designed to provide a tuition-free guarantee to low-income state residents.<sup>22</sup> On top of this state grant, the university provides funding and financing mechanisms to help students cover their demonstrated financial need through supplemental scholarships, grants, work-study, and need-based loans (limited to \$4,500 a year).
- ▶ The **University of Wisconsin-Madison’s** FASTrack program is a promise program designed to cover a student’s full need if they meet standardized test and GPA requirements.<sup>23</sup> FASTrack is supplemented by a small need-based grant from the state. In 2018, the university also announced it would fully cover tuition for state residents from families earning less than the median income statewide, and the only academic requirement for this program is acceptance to the university.<sup>24</sup>

The most unaffordable flagships each have high tuition and minimal investment in need-based aid. **Alabama, Kentucky, Pennsylvania,** and **South Carolina** all exemplify this model. **Penn State University** has the second highest cost of attendance among flagships, at \$35,068 per year, and the other three states maintain flagships with sticker prices of approximately \$30,000.

Only two of these high-cost states supplement federal Pell Grants with any state- or institution-level grants for Sonja, the low-income student in our analysis, but these grants

are minimal.<sup>25</sup> **Kentucky** provides a total of \$4,050 in state aid and \$600 in institutional aid to Sonja, and she could receive approximately \$3,000 in state or institutional aid at **Pennsylvania State University**. Taken together, tightfisted need-based aid policies in these states leave Sonja on the hook for approximately \$15,000 to \$20,000 of unmet need, per year, after grants and scholarships are applied.

## THE MOST AFFORDABLE FLAGSHIPS RATE POORLY ON ACCESS

Affordable flagships are critical in catalyzing mobility for low-income state residents and meeting state workforce demands. Yet making college affordable is not enough to open wide the doors of opportunity for talented, hard-working students of modest means. In fact, among the 10 most affordable flagships for low-income dependent students, five have Pell enrollment rates lower than 15 percent: **Delaware, Maryland, Michigan, Virginia,** and **Wisconsin**. These extraordinarily low enrollment rates of low-income students are less than half the national average of 30 percent at “very selective” four-year institutions (see **Figure 1**).<sup>26</sup>

Making college affordable for low-income students is valuable. Making it affordable and committing to enrolling reasonable numbers of low-income students is critical. While financial considerations must be taken into account when evaluating institutional pricing strategies, financial aid allocation, and how many low-income students to enroll, certain institutions, like **Virginia, Michigan,** and **Wisconsin,** have substantial resources in some of the largest endowments in the country.<sup>27</sup>

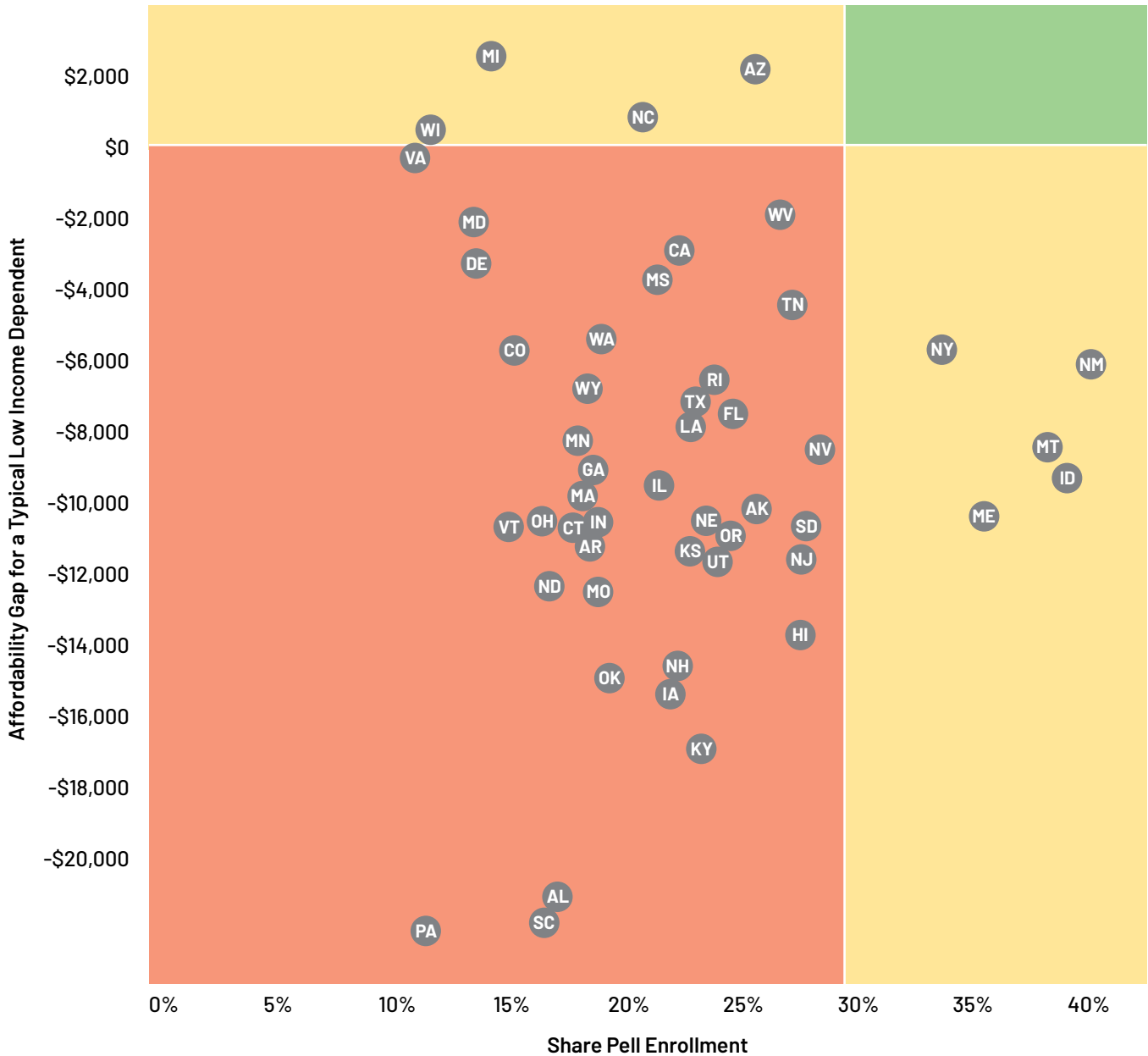
Recruiting and enrolling low-income students requires an institutional commitment to diversity and an equity-minded approach to admissions. Flagships should commit to recruiting in all corners of their state, with a focus on high-poverty high schools. Admissions practices such as the use of early decision and early action, overreliance on standardized test scores, and consideration of legacy status, demonstrated interest, or criminal justice involvement disproportionately benefit wealthy students and create additional barriers to higher education for students with fewer resources.<sup>28</sup> And, once students are enrolled, institutions should commit to seeing them through to graduation.

To be fair, some flagships do enroll large proportions of low-income students. Universities of **Idaho, Maine, Montana,** and **New Mexico** all have Pell enrollments of over 35 percent—above the national average for very selective four-year institutions. Unfortunately, none of these institutions are affordable for Sonja, our low-income student.



**FIGURE 1: Affordability Gaps by Pell Enrollment at Public Flagship Institutions**

Figure 1 plots Pell enrollment against low-income unmet/overmet need. Institutions to the far right enroll high shares of Pell students, while institutions towards the top are more affordable for low-income dependent students.



**Flagship Institutions by State**

<b>AL</b> U. OF ALABAMA	<b>IN</b> INDIANA U.—BLOOMINGTON	<b>NE</b> U. OF NEBRASKA—LINCOLN	<b>RI</b> U. OF RHODE ISLAND
<b>AK</b> U. OF ALASKA FAIRBANKS	<b>IA</b> U. OF IOWA	<b>NV</b> U. OF NEVADA—RENO	<b>SC</b> U. OF SOUTH CAROLINA
<b>AZ</b> U. OF ARIZONA	<b>KS</b> U. OF KANSAS	<b>NH</b> U. OF NEW HAMPSHIRE	<b>SD</b> U. OF SOUTH DAKOTA
<b>AR</b> U. OF ARKANSAS	<b>KY</b> U. OF KENTUCKY	<b>NJ</b> RUTGERS U. (NJ)	<b>TN</b> U. OF TENNESSEE
<b>CA</b> U. OF CALIFORNIA—BERKELEY	<b>LA</b> LOUISIANA STATE U.	<b>NM</b> U. OF NEW MEXICO	<b>TX</b> U. OF TEXAS—AUSTIN
<b>CO</b> U. OF COLORADO—BOULDER	<b>ME</b> U. OF MAINE	<b>NY</b> U. AT BUFFALO (NY)	<b>UT</b> U. OF UTAH
<b>CT</b> U. OF CONNECTICUT	<b>MD</b> U. OF MARYLAND—COLLEGE PARK	<b>NC</b> U. OF NORTH CAROLINA—CHAPEL HILL	<b>VT</b> U. OF VERMONT
<b>DE</b> U. OF DELAWARE	<b>MA</b> U. OF MASSACHUSETTS—AMHERST	<b>ND</b> U. OF NORTH DAKOTA	<b>VA</b> U. OF VIRGINIA
<b>FL</b> U. OF FLORIDA	<b>MI</b> U. OF MICHIGAN	<b>OH</b> OHIO STATE U.	<b>WA</b> U. OF WASHINGTON
<b>GA</b> U. OF GEORGIA	<b>MN</b> U. OF MINNESOTA	<b>OK</b> U. OF OKLAHOMA	<b>WV</b> WEST VIRGINIA U.
<b>HI</b> U. OF HAWAII—MANOA	<b>MS</b> U. OF MISSISSIPPI	<b>OR</b> U. OF OREGON	<b>WI</b> U. OF WISCONSIN—MADISON
<b>ID</b> U. OF IDAHO	<b>MO</b> U. OF MISSOURI	<b>PA</b> PENN STATE U.	<b>WY</b> U. OF WYOMING
<b>IL</b> U. OF ILLINOIS—CHAMPAIGN URBANA	<b>MT</b> U. OF MONTANA		

## MANY FLAGSHIPS COULD REALLOCATE AID TO LOW-INCOME STUDENTS

How institutions and states prioritize their valuable aid dollars matters. For low-income students, the impact of each dollar is far greater than for their high-income peers because the affordability gaps these students face are much greater. The federal government provides Pell Grants to low-income students who need financial support to attend college, but Pell alone does not address the substantial affordability hurdles that exist for many students.<sup>29</sup>



FLAGSHIPS AND THEIR STATES COULD MAKE A REAL DIFFERENCE FOR LOW-INCOME STUDENTS BY SHIFTING AID DOLLARS TOWARD THE STUDENTS WHO ABSOLUTELY NEED THE SUPPORT TO ACCESS AND SUCCEED IN COLLEGE.

States and institutions should strive to supplement these federal investments by providing grant aid to low-income and working-class students. Instead, as we've seen, many states and institutions use their valuable aid dollars to lower costs for the wealthiest students.<sup>30</sup> Indeed, Maria—the high-income dependent student in our analysis—receives state or institutional grants to attend 34 out of the 50 flagships. In 11 states, she receives \$5,000 or more per year, and in Tennessee, her state and institutional aid totals over \$15,000.

Poor aid prioritization can exacerbate affordability gaps. For example, at the **University of Alabama**, our low-income dependent student, Sonja, will need to come up with nearly \$20,000 per year to cover tuition and living expenses, while our high-income student, Maria, has nearly \$16,000 in extra resources after paying for college. What's more, the institution and state award no aid to the low-income students in this analysis. In contrast, \$5,000 per year is awarded to Maria, and \$2,500 per year is awarded to Ava, the middle-income student.

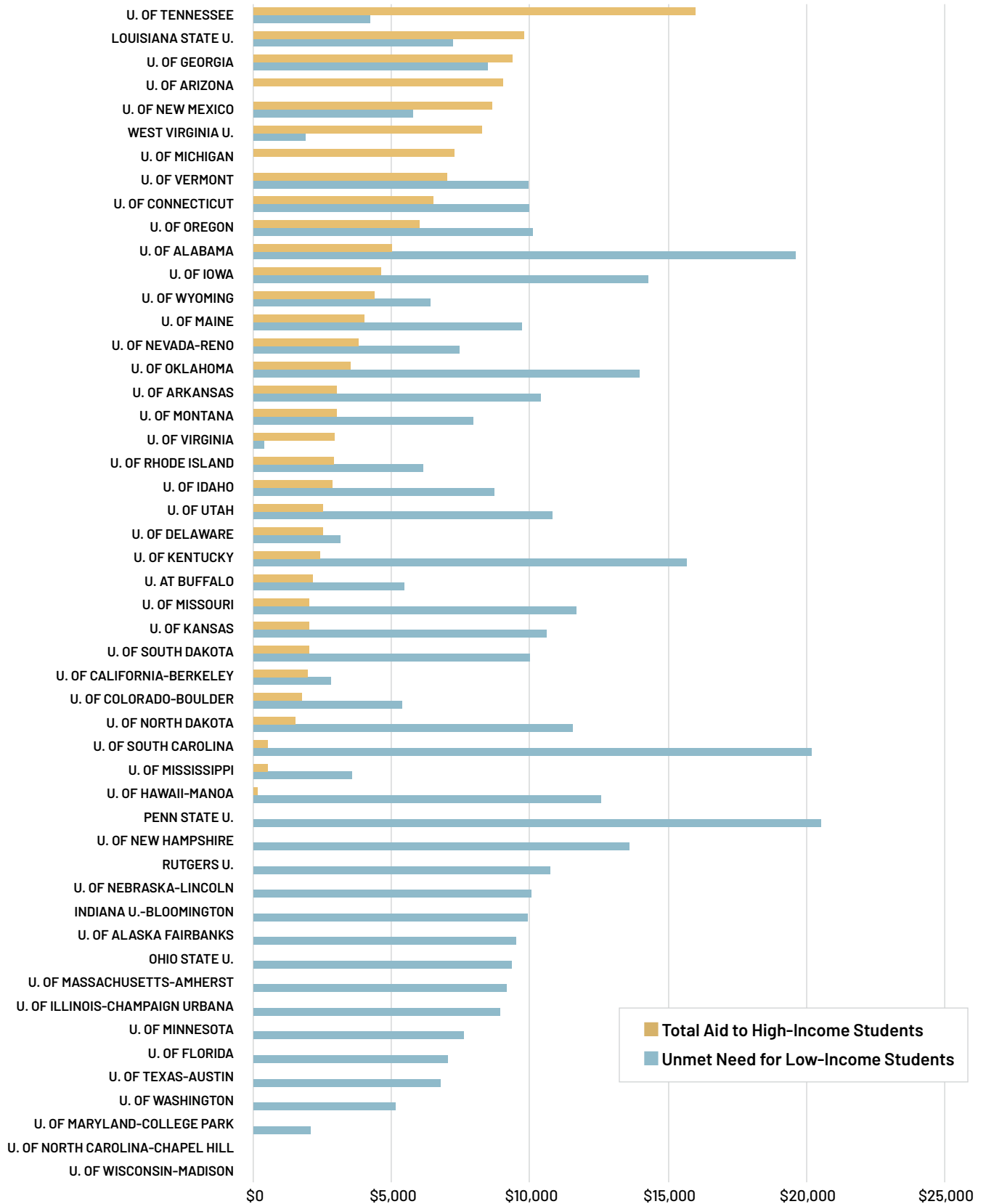
The **University of Alabama** is not alone in poorly targeting grant aid. At flagship institutions in six states—**Georgia, Louisiana, New Mexico, Tennessee, Virginia, and West Virginia**—the state and institutional grants awarded to Maria, our high-income student, could fully pay for the unmet need of our low-income student, Sonja (see **Figure 2** on page 11). These flagships and their states could make a real difference for low-income students by shifting aid dollars toward the students who absolutely need the support to access and succeed in college.

### Why aren't low-income students better represented in selective colleges?

Low-income students face many barriers to college access and success because of systemic inequities in our educational system—and society at large. K-12 schools in low-income areas are routinely underfunded, offer students less access to a rigorous academic curriculum, and do not provide sufficient college counseling.<sup>31, 32, 33</sup> Relatedly, low-income students are less likely to take college admissions tests or to benefit from expensive test preparation services or college admissions coaching.<sup>34</sup> Unfortunately, many institutions' admissions policies fail to adequately account for these systemic challenges.

Despite these systemic inequities in college preparation and test taking, tens of thousands of high achieving, low-income students apply to resource-poor and non-selective two- and four-year institutions, when they could thrive at more selective colleges.<sup>35</sup> Recruitment and admissions policies matter, and public institutions hold a responsibility to actively seek out low-income students who could benefit from the education they offer. Yet, many selective universities actively recruit from public and private high schools in high-income communities rather than devoting substantial resources to recruiting in low-income communities.<sup>36</sup>

**FIGURE 2: Aid to High Income Students Would Better Serve Those with Unmet Need**



We combine institutional and state aid awards reported in Net Price calculators because of the complexity of disentangling these amounts at many public flagship institutions. While some schools break this aid out clearly, other schools combine state and institutional scholarships or otherwise do not make the source of the funding clear.

## STATE INVESTMENT MATTERS

Since a significant portion of public flagship institutions' budgets are defined by state governments, state appropriations to public flagships are one factor influencing the prices students must pay. Unfortunately, 41 out of 50 states appropriate less per student than they did at the beginning of the Great Recession—with 17 of these states spending over 20 percent less per student.<sup>37</sup> In 2018, states appropriated an average of over \$1,600 less per student than they did at the turn of the century.<sup>38</sup> Over the same timeframe, average tuition costs per student rose by nearly \$3,000.<sup>39</sup> Put another way, since 2000, the share of per student college costs covered by states has declined from 71 percent to 54 percent, while the share of per student education costs handled by students and their families rose from 29 percent to 46 percent.<sup>40</sup>

Several states also have massive financial aid programs that award scholarships to students regardless of need. For instance, in **South Carolina**—which has the second most expensive school for the low-income student in our analysis—the two largest statewide scholarships are the LIFE Scholarship and the Palmetto Fellowship. Initial eligibility for these programs is based solely on in-state residency, high school grade point average, and standardized test scores—with no consideration of financial need.<sup>41</sup> In 2018, these two scholarships alone accounted for 46 percent of financial aid recipients in the Palmetto State, and 79 percent (\$143 million) of all state-level financial aid disbursements.<sup>42</sup>

South Carolina is not alone—**Georgia's** largest statewide scholarship is the HOPE scholarship. In 2019, \$834 million went into this massive aid program, which is awarded

to students irrespective of their financial need.<sup>44</sup> Georgia spends far more on non-need-based aid than any other state, and low-income students are underrepresented among these HOPE recipients. **Table 2** shows that in 2017, the highest ten states by non-need-based expenditures accounted for nearly \$1.9 billion in aid, and that the vast majority of this funding was directed to public institutions. While some of this aid is awarded to low-income students, it could be better targeted if all of the aid was redirected based on financial need.

## POLICY RECOMMENDATIONS

The analysis here underscores that public flagship institutions in many cases are failing to provide an affordable, accessible education to residents of the states they serve. Addressing these failures and ensuring public flagships fulfill their promise will require substantial investments from states and institutions, a shift in priorities to invest first and foremost in low-income students, and the adoption of strategies to increase enrollment among diverse groups of students. We recommend the following strategies as a minimum for addressing gaps in affordability and access at public flagships:

### 1 Award state and institutional aid based on student need.

In the 2017-2018 academic year, states and institutions outlaid approximately \$60 billion in grant aid to undergraduate students—more than 2.5 times what they spent in 2000.<sup>45</sup> However, policymakers and administrators have increasingly chosen to prioritize non-need-based grants and scholarships. Over the last three decades, the share of state grants per FTE student that are need-based has fallen from 91 percent to only 76 percent.<sup>46</sup> Furthermore, only 18 percent of students in the bottom income quartile received institutional need-based grants while attending public four-year universities.<sup>47</sup> To improve affordability for low-income students, states and institutions should use their financial aid resources to invest first and foremost in low-income students.

### 2 Design need-based aid programs to cover all unmet need for low-income students, including non-tuition expenses.

On average, non-tuition expenses represent well over half of the total cost of attendance at our nation's public four-year institutions.<sup>48</sup> Relatedly, substantial numbers of college students report struggling with food and housing insecurity.<sup>49, 50</sup> Yet many new affordability programs, like state and institutional free college or promise programs, do not offer support for non-tuition expenses.<sup>51</sup> Increasing aid availability for tuition and non-tuition costs would help provide students the resources they need to succeed academically.

**TABLE 2: The Ten Highest Statewide Non-Need-Based Aid Expenditures (FY 2017)**

State	Non-Need-Based Expenditures	Share to Public Institutions	Share to Private (non-profit) Institutions
GEORGIA	\$568,603,520	92%	8%
SOUTH CAROLINA	\$274,141,777	82%	18%
TENNESSEE	\$251,352,878	81%	19%
FLORIDA	\$204,107,475	89%	11%
LOUISIANA	\$199,752,517	94%	6%
KENTUCKY	\$113,230,751	83%	16%
ARKANSAS	\$102,002,751	86%	14%
NEW MEXICO	\$82,324,597	N/A	N/A
MISSOURI	\$54,135,641	91%	9%
WEST VIRGINIA	\$47,080,792	N/A	N/A
TOTAL	\$1,896,732,699		

Data: 2018 NASSGAP Annual Survey<sup>43</sup>

**3 Restore and increase general appropriations to all public institutions.** Since 2000, full-time enrollment in public institutions has risen nearly thirty percent, while total state educational appropriations to these institutions have risen by only six percent. As a result, public institutions have turned to undesirable means to balance their budgets, such as raising tuition and recruiting out-of-state students who will pay much higher tuition rates to attend.<sup>52, 53</sup> A meaningful reinvestment in public institutions—accompanied by lower tuition charges to the students they serve—will help flagships and other public institutions return to providing affordable, high quality, college options for their state residents. For their part, institutions also have a responsibility to ensure that all resources are allocated in ways that best promote student access, affordability, and success.

**4 Prioritize access for low-income students at public flagship institutions.** Many highly selective public flagship institutions have disproportionately low Pell enrollment, despite studies illustrating that tens of thousands of low-income students are academically prepared to thrive at the most selective institutions.<sup>54, 55, 56</sup> Institutions can take specific steps to increase access. For example, they should recruit low-income students more actively<sup>57, 58</sup> and improve the admissions process by ending the use of early decision<sup>59</sup> and legacy preference,<sup>60</sup> which create additional barriers to admission for low-income students and students of color. At a minimum, flagship institutions should strive to close equity gaps in access to higher education in their states by aiming to enroll a share of Pell students proportionate to the overall share of Pell enrollment in their state. For more details on designing equitable admissions practices at public flagships, see *Inequities Persist: Access and Completion Gaps at Public Flagships in the Great Lakes Region*.<sup>61</sup>

Federal and state policymakers can also create incentives for selective institutions to better serve low-income students. States should work to promote access for underserved students through efforts such as providing support to navigate the Free Application for Federal Student Aid, requiring and paying for college admissions tests for all graduating high school students, and developing strong high school-to-college and adult reengagement programs.

**5 Design and implement a federal-state partnership to encourage states and institutions to prioritize high-quality, affordable, and accessible higher education options for all students.** State disinvestment negatively impacts the ability of public institutions—including flagships, but especially less selective, historically under-resourced institutions like community colleges—to provide high-quality and low-cost educational options. However, given the many competing priorities states must fund—including critical expenditures like Medicare and Medicaid, K-12 education, and infrastructure investments—along with constituency pressure to keep taxes low, states are unlikely to adequately reinvest in higher education without additional support and encouragement from federal policymakers in doing so. Federal policymakers should leverage their existing financial investment in higher education and provide additional financial support to states and institutions to improve affordability, quality, and access through the creation of a federal-state partnership.

## CONCLUSION

Public flagships can play a transformational role for the students who attend and complete degrees, as well as for society at-large. For states, flagship universities promise an educated workforce, research opportunities, jobs, commerce, and economic development.<sup>62, 63</sup> For graduates, these institutions promise higher employment rates, higher incomes, and greater job security.<sup>64, 65, 66</sup> College graduates experience non-economic benefits as well: they are more likely to volunteer, vote, exercise regularly, and read to their children, and less likely to smoke cigarettes or rely on government benefits to make ends meet.<sup>67</sup> Because of these benefits, the value of an affordable flagship education for a low-income student is even more acute because it promises real economic opportunity and a better shot at success.

Unfortunately, this analysis illustrates that most flagships are not affordable for the students who stand to benefit most—hardworking students with limited means who are striving for the economic freedom that a high-quality college education can provide. Unless states and institutions change their priorities to make these universities more affordable, they risk perpetuating rather than disrupting the cycle of intergenerational poverty that has persisted for decades. In a country founded on the ideal that hard work—not the circumstances of your birth—should determine your destiny, flagships should strive tirelessly to be the rapid catalysts of economic mobility that they can be.

## Endnotes

- 1 Poutré, A., Rorison, J., & Voight, M. (2017). Limited means, limited options: College remains unaffordable for many Americans. Retrieved from Institute for Higher Education Policy website: [http://www.ihep.org/sites/default/files/uploads/docs/pubs/limited\\_means\\_limited\\_options\\_report\\_final.pdf](http://www.ihep.org/sites/default/files/uploads/docs/pubs/limited_means_limited_options_report_final.pdf).
- 2 IHEP analysis of 2016–2017 state appropriations and full-time undergraduate enrollment data from the Integrated Postsecondary Education Data System (IPEDS) a product of the National Center for Education Statistics, U.S. Department of Education. Data downloaded on June 25, 2019. Note that estimates do not account for graduate enrollment.
- 3 Carnevale, A.P., & Strohl, J. (2013). Separate and unequal: How higher education reinforces the intergenerational reproduction of White racial privilege. Georgetown University. Retrieved from: <https://cew.georgetown.edu/cew-reports/separate-unequal/#full-report>
- 4 Chakrabarti, R., & Jiang, M. (2018). Education's role in earnings, employment, and economic mobility. The Federal Reserve Bank of New York. Retrieved from: <http://libertystreeteconomics.newyorkfed.org/2018/09/educations-role-in-earnings-employment-and-economic-mobility.html>
- 5 State Higher Education Executive Officers Association (2019). SHEF: State Higher Education Finance Retrieved from the SHEEO website: <https://sheeo.org/project/state-higher-education-finance/>.
- 6 The College Board. (2019). Trends in student aid: 2018. Figure 23A. Retrieved from the College Board website: <https://trends.collegeboard.org/student-aid/figures-tables/need-based-and-non-need-based-state-grants-undergraduate-student-over-time>
- 7 Center on Budget and Policy Priorities (2018). Pell grants cover shrinking share of college costs. Retrieved from the Center on Budget and Policy Priorities website: <https://www.cbpp.org/pell-grants-cover-shrinking-share-of-college-costs>.
- 8 See New America Foundation's Stephen Burd in the *Undermining Pell* series. 1) Burd, S. (2013). Undermining Pell: How colleges compete for wealthy students and leave the low-income behind. Retrieved from the New America website: [https://static.newamerica.org/attachments/2320-undermining-pell-2/Merit\\_Aid%20Final\\_b3b89c275d2249eeb19cb53d3fc049b6.pdf](https://static.newamerica.org/attachments/2320-undermining-pell-2/Merit_Aid%20Final_b3b89c275d2249eeb19cb53d3fc049b6.pdf); 2) Burd, S. (2014). Undermining Pell: Volume II - How colleges' pursuit of prestige and revenue is hurting low-income students. Retrieved from the New America website: <https://www.newamerica.org/education-policy/policy-papers/undermining-pell-volume-ii/>; 3) Burd, S. (2016). Undermining Pell: Volume III - The news keeps getting worse for low-income students. Retrieved from the New America website: <https://www.newamerica.org/education-policy/policy-papers/undermining-pell-volume-iii/>; 4) Burd, S. (2018). Undermining Pell: Volume IV - How the privatization of public higher education is hurting low-income students. Retrieved from: <https://www.newamerica.org/education-policy/reports/undermining-pell-iv/>.
- 9 Poutré, A., Rorison, J., & Voight, M. (2017). Limited means, limited options: College remains unaffordable for many Americans. Retrieved from Institute for Higher Education Policy website: [http://www.ihep.org/sites/default/files/uploads/docs/pubs/limited\\_means\\_limited\\_options\\_report\\_final.pdf](http://www.ihep.org/sites/default/files/uploads/docs/pubs/limited_means_limited_options_report_final.pdf).
- 10 Perna, L.W., Wright-Kim, J., & Jiang, N. (2019). Questioning the calculations: Are colleges complying with Federal and ethical mandates for providing students with estimated costs Retrieved from the PennAHEAD website: [https://www.gse.upenn.edu/pdf/ahead/Questioning\\_the\\_Calculations.pdf](https://www.gse.upenn.edu/pdf/ahead/Questioning_the_Calculations.pdf).
- 11 The University of Arizona Office of Scholarships and Financial Aid (2019). 2019–2020 Arizona Assurance Program: Information for current high school seniors. Retrieved from the University of Arizona's OSFA website: <https://financialaid.arizona.edu/types-of-aid/arizona-assurance/high-school-seniors>.
- 12 University of Miami Office of Undergraduate Admission. (2019). First-year merit scholarships. Retrieved from the University of Miami Undergraduate Admission website: <https://admissions.miami.edu/undergraduate/financial-aid/scholarships/freshman/index.html>.
- 13 Illinois' Student Assistance Commission. (2019). Monetary Award Program. Retrieved from the ISAC website: <https://www.isac.org/students/during-college/types-of-financial-aid/grants/monetary-award-program/>.
- 14 Oregon Student Aid Council. (2019). Oregon Opportunity Grant. Retrieved from the OSAC website: <https://oregonstudentaid.gov/oregon-opportunity-grant.aspx>.
- 15 Vermont Student Assistance Corporation. (2019). Vermont Incentive Grant. Retrieved from the VSAC website: <https://www.vsac.org/pay/student-aid-options/grants#vermont-grants>.
- 16 The Lumina Foundation. (2019). By the numbers: Today's student. Retrieved from the Lumina Foundation's website: <https://www.luminafoundation.org/files/resources/todays-student-infographic-2.pdf>.
- 17 Eckerson Peters, E., Roberson, A.J., & Voight, M. (2019). The cost of opportunity: Student stories of college affordability. Retrieved from Institute for Higher Education Policy website: <http://www.ihep.org/research/publications/cost-opportunity-student-stories-college-affordability>.
- 18 Walizer, L. (2018). When financial aid falls short: New data reveal students face thousands in unmet need. Retrieved from the Center for Law and Social Policy website: <https://www.clasp.org/sites/default/files/publications/2018/12/2018whenfinancialaidfallsshort.pdf>.
- 19 The Lumina Foundation (2015). A benchmark for making college affordable. Retrieved from the Lumina Foundation Website: <https://www.luminafoundation.org/files/resources/affordability-benchmark-1.pdf>.
- 20 Office of Scholarships and Student Aid. (2019). The Carolina Covenant. Retrieved from the University of North Carolina's OSA website: <https://carolinacovenant.unc.edu/>.
- 21 Office of Undergraduate Admissions. (2019). Go Blue Guarantee: Learn how affordable a world-class university can be. Retrieved from the University of Michigan Office of Undergraduate Admissions: <https://goblueguarantee.umich.edu/>.
- 22 Ibid.
- 23 State Council of Higher Education for Virginia. (2017). Virginia guaranteed assistance program. Retrieved from the SCHEV website: <http://www.schev.edu/docs/default-source/tuition-aid-section/undergrad-grad-financial-aid/vgapfactsheet.pdf>. Also; Office of Student Financial Services. (2019). Virginia state grant programs. Retrieved from the University of Virginia Website: <https://sfs.virginia.edu/grantsva>.
- 24 Office of Student Financial Aid. (2019). FASTrack & Banner. Retrieved from the University of Wisconsin's OSFA website: <https://financialaid.wisc.edu/types-of-aid/ftb/>.
- 25 Office of Student Financial Aid. (2019). Bucky's Tuition Promise. Retrieved from the University of Wisconsin's OSFA website: <https://financialaid.wisc.edu/types-of-aid/tuition-promise/>.
- 26 Neither net price calculator provided the name of the awarded grant(s) in the output. Therefore, we do not know if these grants are need-based or non-need-based. We also do not know if these grants were provided by the state or the institution.
- 27 IHEP analysis of 2015–16 data from the National Postsecondary Student Aid Study (NPSAS:16), a product of the National Center for Education Statistics, U.S. Department of Education. Computation by NCES PowerStats Version 1.0 on March 22, 2019. Variables: PELLAMT and SELECTV3. Weight: WTA000.
- 28 National Center for Education Statistics. (2017). Digest of Education Statistics: Table 333.90. Retrieved from the National Center for Education Statistics website: [https://nces.ed.gov/programs/digest/d17/tables/dt17\\_333.90.asp?current=yes](https://nces.ed.gov/programs/digest/d17/tables/dt17_333.90.asp?current=yes).
- 29 Eckerson Peters, E. & Voight, M. (2018). Inequities persist: Access and completion gaps at public flagships in the Great Lakes region. Retrieved from the Institute for Higher Education Policy website: <http://www.ihep.org/research/publications/inequities-persist-access-and-completion-gaps-public-flagships-great-lakes>.
- 30 Center on Budget and Policy Priorities (2018). Pell grants cover shrinking share of college costs. Retrieved from the Center on Budget and Policy Priorities website: <https://www.cbpp.org/pell-grants-cover-shrinking-share-of-college-costs>.
- 31 Burd, *Undermining Pell*.
- 32 Morgan, I. & Amerikaner, A. (2018). Funding gaps 2018. Retrieved from the Education Trust website: <https://edtrust.org/resource/funding-gaps-2018/>.

- 32 Theokas, C. & Saaris, R. (2013). Finding America's missing AP and IB students. Retrieved from the Education Trust website: [https://edtrust.org/wp-content/uploads/2013/10/Missing\\_Students.pdf](https://edtrust.org/wp-content/uploads/2013/10/Missing_Students.pdf).
- 33 Creating a high school culture of college-going: The case of Washington state achievers. Retrieved from the Institute for Higher Education Policy website: <http://www.ihep.org/research/publications/creating-high-school-culture-college-going-case-washington-state-achievers>.
- 34 Dynarski, S.M. (2018). ACT/SAT for all: A cheap, effective way to narrow income gaps in college. Retrieved from the Brookings Institute website: <https://www.brookings.edu/research/act-sat-for-all-a-cheap-effective-way-to-narrow-income-gaps-in-college/>.
- 35 Hoxby, C. & Avery, C. (2012). The missing one-offs: The hidden supply of high-achieving, low income students. Retrieved from the National Bureau of Economic Research website: <https://www.nber.org/papers/w18586.pdf>.
- 36 Han, C., Jaquette, O., & Salazar, K. (2019). Recruiting the out-of-state university: Off-campus recruiting by public research universities. Retrieved from: [https://emrresearch.org/sites/default/files/2019-03/joyce\\_report.pdf](https://emrresearch.org/sites/default/files/2019-03/joyce_report.pdf).
- 37 State Higher Education Executive Officers Association (2019). SHEF: State higher education finance. Retrieved from the SHEEO website: <https://sheeo.org/project/state-higher-education-finance/>.
- 38 Ibid.
- 39 Ibid.
- 40 State Higher Education Executive Officers Association (2019). SHEF: State higher education finance. *Figure 1*. Retrieved from the SHEEO website: <https://sheeo.org/project/state-higher-education-finance/>.
- 41 South Carolina Commission on Higher Education. (2014). Scholarships & grants. Retrieved from the SCCHE website: [http://www.che.sc.gov/CHE\\_Docs/student-services/scholarship\\_brochure\\_2014.pdf](http://www.che.sc.gov/CHE_Docs/student-services/scholarship_brochure_2014.pdf).
- 42 South Carolina Commission on Higher Education. (2019). Five-year summary of scholarship recipients. Retrieved from the SCCHE website: <https://www.che.sc.gov/DataPublications.aspx>.
- 43 IHEP analysis of FY 2017 NASSGAP survey data, a product of the National Association of State Student Grant and Aid Programs (NASSGAP). Downloaded on June 17th, 2019 from: [https://www.nassgapsurvey.com/table8\\_history\\_2004-2017.xlsx](https://www.nassgapsurvey.com/table8_history_2004-2017.xlsx).
- 44 Lee, J. (2018). Overview: 2019 fiscal year budget for lottery funded programs. Retrieved from the Georgia Budget and Policy Institute website: <https://gbpi.org/2018/overview-2019-georgia-budget-lottery-funded-programs/>.
- 45 The College Board. (2019). Trends in student aid: 2018. *Figure 3*. Retrieved from The College Board website: <https://trends.collegeboard.org/student-aid/figures-tables/total-undergraduate-student-aid-source-and-type-over-time>.
- 46 The College Board. (2019). Trends in student aid: 2018. *Figure 23A*. Retrieved from The College Board website: <https://trends.collegeboard.org/student-aid/figures-tables/need-based-and-non-need-based-state-grants-undergraduate-student-over-time>.
- 47 IHEP analysis of 2015-16 data from the National Postsecondary Student Aid Study (NPSAS:16) a product of the National Center for Education Statistics, U.S. Department of Education. Computation by NCES PowerStats Version 1.0 on March 30, 2019. Variables: INCQUART, SECTOR4 and INSTNEED. Weight: WTA000.
- 48 The College Board. (2018). Trends in college pricing: 2018. Table 1. Retrieved from the College Board website: <https://trends.collegeboard.org/college-pricing/figures-tables/average-published-undergraduate-charges-sector-2018-19>.
- 49 Blagg, K., Whitmore-Schanzenbach, D., Gundersen, C., & Ziliak, J. (2017). Assessing food insecurity on campus. Retrieved from the Urban Institute website: <https://www.urban.org/research/publication/assessing-food-insecurity-campus>.
- 50 The Hope Center. (2018). #RealCollege annotated bibliography: Basic needs insecurity among college students. Retrieved from the Hope Center's website: [https://hope4college.com/wp-content/uploads/2019/01/Basic-Needs-Studies-Bibliography\\_12.21.18.pdf](https://hope4college.com/wp-content/uploads/2019/01/Basic-Needs-Studies-Bibliography_12.21.18.pdf).
- 51 Mishory, J. (2018). The future of statewide college promise programs. Retrieved from The Century Foundation's website: <https://tcf.org/content/report/future-statewide-college-promise-programs/>.
- 52 Howle, E.M. & Cordiner, D. (2016). The University of California: Its admissions and financial decisions have disadvantaged California resident students. Retrieved from the California State Auditor's website: <https://www.auditor.ca.gov/pdfs/reports/2015-107.pdf>.
- 53 Han, C., Jaquette, O., & Salazar, K. (2019). Recruiting the out-of-state university: Off-campus recruiting by public research universities. Retrieved from: [https://emrresearch.org/sites/default/files/2019-03/joyce\\_report.pdf](https://emrresearch.org/sites/default/files/2019-03/joyce_report.pdf).
- 54 Hoxby, C., & Avery, C. (2012). The missing one-offs: The hidden supply of high-achieving, low-income students. Retrieved from the National Bureau of Economic Research website: <https://www.nber.org/papers/w18586.pdf>.
- 55 Carnevale, A. P. & Van Der Werf, M. (2017). The 20% solution: Selective colleges can afford to admit more Pell Grant recipients. Retrieved from the Georgetown Center for Education and the Workforce website: <https://cew.georgetown.edu/cew-reports/pell20/#full-Report>.
- 56 Burd, S. (2018). Undermining Pell: Volume IV - How the privatization of public higher education is hurting low-income students. Retrieved from: <https://www.newamerica.org/education-policy/reports/undermining-pell-iv/>.
- 57 Hoxby, C. & Turner, S. (2013). Informing students about their college options: A proposal for broadening the expanding college opportunities project. Retrieved from the Hamilton Project website: [http://www.hamiltonproject.org/assets/legacy/files/downloads\\_and\\_links/THP\\_HoxbyTurner\\_FINAL.pdf](http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/THP_HoxbyTurner_FINAL.pdf).
- 58 Hoxby, C. & Turner, S. (2015). What high-achieving low-income students know about college. Retrieved from the National Bureau of Economic Research website: <https://www.nber.org/papers/w20861.pdf>.
- 59 Giancola, J. & Kahlenberg, R.D. (2016). True merit: Ensuring our brightest students have access to our best colleges and universities. Retrieved from the Jack Kent Cooke Foundation website: <https://www.jkcf.org/research/true-merit-ensuring-our-brightest-students-have-access-to-our-best-colleges-and-universities/>.
- 60 Hurwitz, M. (2011). The impact of legacy status on undergraduate admissions at elite colleges and universities. *Economics of Education Review*, 30(3), 480-492.
- 61 Peters & Voight, Inequities persist.
- 62 Hahn, A., Coonerty, C., & Peaslee, L. (2003). Colleges and universities as economic anchors: Profile of promising practices. Retrieved from: [https://depts.washington.edu/ccph/pdf\\_files/hahn.pdf](https://depts.washington.edu/ccph/pdf_files/hahn.pdf).
- 63 Youtie, J. & Shapira, P. (2008). Building an innovation hub: A case study of the transformation of university roles in regional technological and economic development. *Research Policy*, 37(8), 1188-1204, doi:10.1016/j.respol.2008.04.012.
- 64 The College Board. (2016). Education pays: The benefits of higher education for individuals and society. Retrieved from the College Board website: <https://trends.collegeboard.org/sites/default/files/education-pays-2016-full-report.pdf>.
- 65 Fitzgerald, T.J., Davies, P., & Chung, W. (2010). Degrees of job security Retrieved from the Federal Reserve Bank of Minneapolis website: <https://www.minneapolisfed.org/publications/the-region/degrees-of-job-security>.
- 66 The Chronicle of Higher Education. (2012). The role of higher education in career development: Employer perceptions. Retrieved from: <https://chronicle-assets.s3.amazonaws.com/5/items/biz/pdf/Employers%20Survey.pdf>.
- 67 The College Board. (2016). Education pays: The benefits of higher education for individuals and society. . Retrieved from the College Board website: <https://trends.collegeboard.org/sites/default/files/education-pays-2016-full-report.pdf>.



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