A report for The Institute for College Access and Success (TICAS) authored by Donald E. Heller.

Introduction

This monograph builds on an earlier report from The Institute on College Access & Success that examined the barriers students from low- and moderate-income families face in enrolling in and persisting through college (Heller, 2023). That report defined those barriers in the form of a "college affordability gap," or the difference between the price of college less what the student and her family can afford to contribute to her education, available grant aid, and a reasonable amount of work during the academic year and summers. The concept is to identify a policy framework that would allow these students to attend a public institution in their home state and earn a degree without incurring student loan debt while earning their degrees.

This college affordability gap is defined as:

$$\text{CAG} = \text{COA} - (\text{EFC/SAI} + \text{grants} + \text{work}) \text{ where}$$

COA = estimated cost of attendance (the sum of in-state tuition, required fees, room, board, books, and other expenses) for students attending public institutions in their home state;

EFC = an estimated expected family contribution (the Student Aid Index will replace the EFC in the 2024-2025 academic year);

Grants = sum of all federal, state, local, and institutional grant aid; and

Work = estimate of student earnings from a reasonable expectation of work during the school year and summer, i.e., part-time work that does not interfere with the student's academic progress (described in more detail below)

Ideally, the CAG for a financially needy student would be zero—the combination of their own and their family's resources, as determined by the EFC calculations, plus awarded grant aid and a reasonable amount of work earnings, would be sufficient to meet the total cost of attendance, and thus would allow the student to attend without relying on student loans to finance their college education.

The earlier report used data from public institutions in three states—California, Michigan, and New York—and examined the CAG in each state, and within each state, for both two-year and four-year public colleges. This report expands the analysis to nine additional states, all of whom are part of TICAS' recently formed State Policy Network to Advance Debt-Free College (The Institute for College & Success, 2023).

The most recent data available from the U.S. Department of Education National Center for Education Statistics (NCES) cover the 2021-22 academic year. The universe of students included in the NCES data on student financing includes those students who were awarded some form of financial aid from the federal government, including grants, loans, and/or work study, with the detailed data on grants and net price restricted to those students who were residents of the state in which they attended college, i.e., they were paying an in-state tuition rate. The NCES data are reported for students in five income categories, based on their own income (if they are independent students) or a combination of their and their parents' income (if they are dependent students):

1. less than or equal to $30,000
2. $30,001 to $48,000
3. $48,001 to $75,000
4. $75,001 to $110,000
5. greater than $110,000.

Students in the first three categories were used in this report. Students in the first group were those with an EFC of approximately zero (meaning that they and their families were not expected to contribute to the cost of their education) and were therefore eligible for the maximum Pell Grant, which was $6,495 in the 2021-22 academic year if attending full time. Students in the second and third groups were considered to be eligible for a Pell Grant, but less than the maximum grant, and had sufficient resources to be able to contribute a modest amount of EFC.[i] As a benchmark, median household income in the nation in 2021 was $76,330, so the students examined in this report fall roughly in the bottom half of the income distribution (U.S. Census Bureau, 2024b).

To estimate the amount that a student could earn in a year, I took each state's statewide minimum wage in effect in 2021 and assumed that students would work 10 hours/week at that wage for 15 weeks of the fall semester. Most of the nine states examined increased their minimum wage on January 1, 2022, so this new wage was used to calculate 10 hours/week of work for 15 weeks of the spring semester, plus 35 hours/week for 12 weeks in the summer, or a total of 720 hours each year (U.S. Department of Labor, 2024). Ten hours of work during the academic year was chosen because many research studies have demonstrated that excessive work hours during the academic year can interfere with a student's ability to maintain satisfactory academic progress toward their degree.[ii]

Table 1a displays the average values of the components that make up the college affordability gap for students receiving Pell Grants attending two-year institutions and from families with incomes up to $30,000. The average college affordability gap these students faced ranged from a low of $1,111 for students in Washington to a high of $9,698 for students in New Jersey. It is important to note that these estimates assume students attend college full-time.[iii]

Table 1a: College Affordability Gap Component Averages for Students With Family Income Up to $30,000 in Two-Year Institutions

State	Cost of Attendance	Expected Family Contribution	Grants	Work	College Affordability Gap
Colorado	$23,142	$0	$8,689	$9,007	$5,446
Indiana	$17,687	$0	$8,902	$5,220	$3,565
Louisiana	$19,349	$0	$6,911	$5,220	$7,218
Massachusetts	$19,309	$0	$7,095	$10,148	$2,066
Minnesota	$20,806	$0	$6,414	$7,400	$6,992
New Jersey	$25,370	$0	$6,463	$9,210	$9,698
Oregon	$21,517	$0	$7,657	$9,608	$4,252
Rhode Island	$22,002	$0	$6,216	$8,708	$7,079
Washington	$19,871	$0	$8,447	$10,313	$1,111

Note: First-time, full-time students
Source: Author's calculations from National Center for Education Statistics (2024)

There is a wide range among the states in the amounts of the starting point of the college affordability gap calculation: the cost of attending college, which includes tuition, living costs (two-year college students are assumed to be living off-campus but not with their parents), books and supplies, and other expenses. The range is from a low of $17,687 in Indiana to a high of $25,370 in New Jersey. While the average amount of grant aid awarded to students is a smaller range in dollars than the cost of attendance ($2,686 between the highest and lowest states in grants, as compared to a range of $7,683 for cost of attendance), the

percentage ranges are exactly the same. For both the cost of attendance and grants, the highest state is 43 percent greater than the lowest state.

Differences in student earnings over the course of the year are even more stark, driven by differences in the minimum wage across states. A student in Indiana or Louisiana would earn $5,220 for 720 hours of work at the minimum wage of $7.25 in each state. In contrast, a student in Washington would earn $10,313, or almost double that of their peers in Louisiana or Indiana.

These differences in the components lead to a wide range of CAGs across the nine states. Two-year college students in Washington face a CAG of just over $1,000 per year, while those in New Jersey face a gap of almost $10,000. These differences show that state policies—including tuition pricing, grant aid, and even minimum wage policies—can make a huge difference in affordability for students from low- and moderate-income families.

Table 1b shows the same information for students in public four-year institutions. In four of the states—Minnesota, New Jersey, Rhode Island, and Washington—students in four-year institutions faced a *smaller* CAG than those in two-year institutions (in Indiana, students in four-year institutions had a CAG just two dollars greater than those in two-year institutions). In all nine states, the cost of attendance is higher in four-year schools than two-year schools. But the average grant aid received by students in the former is much higher in every state, and in the four states noted above high enough that it more than offsets the higher cost of attendance to lead to a lower CAG for four-year students.

Table 1b: College Affordability Gap Component Averages for Students with Family Income Up to $30,000 In Four-Year Institutions

State	Cost of Attendance	Expected Family Contribution	Grants	Work	College Affordability Gap
Colorado	$28,725	$0	$13,760	$9,007	$5,958
Indiana	$23,960	$0	$15,173	$5,220	$3,567
Louisiana	$26,574	$0	$12,470	$5,220	$8,884
Massachusetts	$31,423	$0	$15,942	$10,148	$5,333
Minnesota	$26,580	$0	$16,628	$7,400	$2,552
New Jersey	$33,856	$0	$17,088	$9,210	$7,558
Oregon	$28,250	$0	$10,933	$9,608	$7,710
Rhode Island	$30,907	$0	$16,809	$8,708	$5,391
Washington	$26,684	$0	$15,874	$10,313	$498

Note: First-time, full-time students
Source: Author's calculations from National Center for Education Statistics (2024)

Table 2a examines students in two-year institutions from families with incomes from $30,001 to $75,000. The pattern of the ranges in each of these measures that were noted in the description of table 1a are similar here. While differences in costs of attendance and average grant aid are relatively modest across the nine states, the differences in the CAG are much larger—$1,063 in Washington compared to $9,138 in New Jersey.[iv] Lower costs of attendance, higher average grant aid, and higher wages all help lead to a lower CAG.

Table 2a: College Affordability Gap Component Averages for Students with Family Income $30,001 - $75,000 in Two-Year Institutions

State	Cost of Attendance	Expected Family Contribution	Grants	Work	College Affordability Gap
Colorado	$23,735	$1,910	$7,234	$9,007	$5,583
Indiana	$17,687	$1,825	$6,634	$5,220	$4,007
Louisiana	$19,740	$1,882	$5,901	$5,220	$6,736
Massachusetts	$19,353	$1,888	$5,809	$10,148	$1,509
Minnesota	$20,551	$1,907	$5,597	$7,400	$5,648
New Jersey	$26,041	$1,846	$5,847	$9,210	$9,138
Oregon	$21,885	$1,899	$6,834	$9,608	$3,544
Rhode Island	$22,002	$1,772	$6,013	$8,708	$5,510
Washington	$19,831	$1,833	$6,622	$10,313	$1,063

Note: First-time, full-time students
Source: Author's calculations from National Center for Education Statistics (2024)

Table 2b shows the components of the CAG for the same group of students in four-year institutions. Similar to the pattern of the students with incomes up to $30,000, in three states—Minnesota, New Jersey, and Washington—students attending these institutions faced a CAG *smaller* than those attending two-year institutions in those same states.

Table 2b: College Affordability Gap Component Averages for Students with Family Income $30,001 - $75,000 in Four-Year Institutions

State	Cost of Attendance	Expected Family Contribution	Grants	Work	College Affordability Gap
Colorado	$29,025	$2,025	$12,320	$9,007	$5,674
Indiana	$24,125	$1,947	$12,010	$5,220	$4,949
Louisiana	$26,773	$1,793	$10,629	$5,220	$9,131
Massachusetts	$31,277	$2,081	$12,991	$10,148	$6,057
Minnesota	$26,276	$2,067	$14,188	$7,400	$2,620
New Jersey	$33,879	$1,808	$14,362	$9,210	$8,499
Oregon	$28,455	$1,966	$10,293	$9,608	$6,589
Rhode Island	$30,952	$2,056	$13,140	$8,708	$7,048
Washington	$27,490	$1,932	$14,619	$10,313	$626

*Note: First-time, full-time students*
Source: Author's calculations from National Center for Education Statistics (2024)

Figure 1 summarizes the bottom line—the CAG, or the financial barrier to college attendance—faced across the nine states by both groups of students and in both sectors. It allows one to easily see the differences across states and within states. Louisiana and New Jersey are the two states with the highest average CAG across the four groups, an interesting finding given the economic differences between the two states. In 2022, Louisiana was the third poorest state as measured by median household income, while New Jersey

was the wealthiest (U.S. Census Bureau, 2024a). On the other end of the scale, the two states with the lowest CAGs also have stark differences in wealth; Indiana was the 13th poorest state in 2022 while Washington was the 6th wealthiest. As noted earlier, state policies clearly make a difference, as these differences in CAG are not being driven by wealth alone.

The differences in CAG within states are also worth noting. In some states, such as Colorado, Indiana, and Washington, the differences in CAG across sectors and income groups are relatively small. In others, such as Massachusetts, Minnesota, and Oregon, there are large differences in the CAG between the two college sectors. Massachusetts and Oregon have a much smaller CAG for students in two-year institutions as compared to those in four-year institutions. In Minnesota, the opposite is true; students in two-year institutions face higher barriers than their peers in four-year institutions. It is important to remember that the students represented in this analysis are all full-time. The differences between the two sectors shown here are not driven by differing percentages of students attending full-time.

Figure 1: Summary of College Affordability Gap by State, Sector, and Family Income
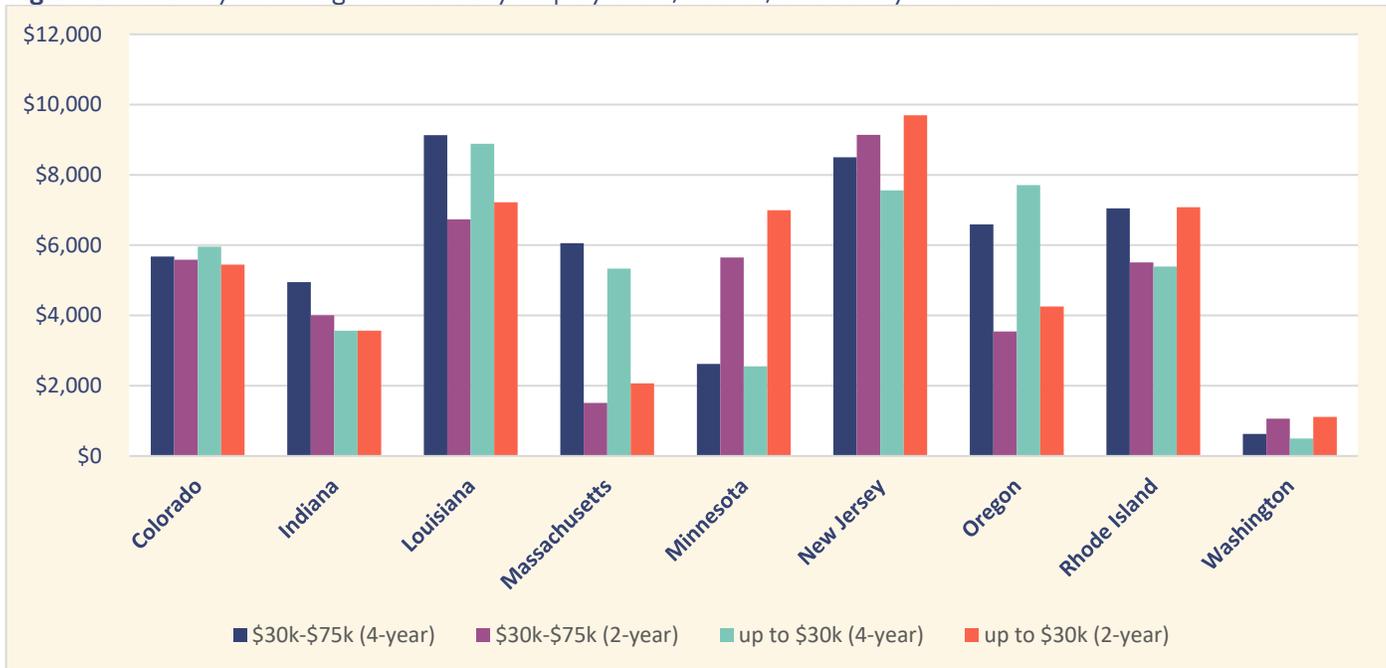
Source: Tables 1a through 2b

Funding Required to Close the College Affordability Gap

These estimates of the college affordability gap faced by each student allow us to calculate the total CAG in each state, or a measure of the amount of additional funding the states would require in order to provide enough resources for every Pell Grant-eligible student to attend college without borrowing or working excessive hours. This additional funding could be provided through a combination of sources, including:

- the states' existing need-based financial aid programs;
- institutional grant programs;
- broadening the existing partnership with the federal government, through expansion of the existing federal Title IV grant programs (such as Pell and Supplemental Educational Opportunity Grants) or creation of a new program;

- a partnership with private sources, including foundations, as many college promise programs are operated;[v] or
- a combination of the above.

While the goal of this analysis is to estimate the amount of funding required to eliminate student loan borrowing for Pell-eligible students, some students may still decide to take out some student loans rather than working the number of hours assumed in this analysis. This would be an individual choice for each student, but the focus here is to calculate the funding required to allow students to graduate debt-free if they were willing to work a reasonable number of hours to help finance their education.

Before providing the estimates, there are three primary limitations to the data that are worth noting.[vi] First, as stated earlier, the estimates of grant awards and aid recipients in each income category at each institution are based on only those students who are eligible for and receive federal Title IV funding. There could be some students in these income categories who *did not* receive federal financial aid, and if so, their college affordability gaps would not be included in these numbers.

Second, these data represent first-time, full-time students only. Without examining the individual financial aid files from each institution, it is impossible to know whether these freshmen students are representative of *all* undergraduates at their colleges and universities. We know from other studies that in at least some ways they are not. For example, part-time students are less likely to receive a Pell Grant than are full-time enrollees, and students further along in their studies are less likely to receive one as well (Kelly, Holian, and Archer, 2019).

The third limitation of the data is that they do not include students who would like to attend college but chose not to because of the financial barriers they faced (or enrolled only part-time, rather than full-time, because of cost barriers). The literature on college access provides much evidence that financial barriers prevent some students from attending college and persisting through to a degree once enrolled.[vii] It is beyond the scope of this report to estimate how many students in each state fall into this category, but the estimates of the total college affordability gaps provided here can be seen as a floor for the amount of funding needed. Additional funding would of course be necessary to meet the financial needs of those students who are currently eligible to and interested in enrolling in college, but do not attend or attend only part-time because of the financial barriers.

With these caveats, table 3 presents an estimate of the additional funding required to close the college affordability gap for those enrolling in college as full-time, first-year students in 2021-22 in each state and sector.

Table 3: Funding Necessary to Close the College Affordability Gap

	Income Up to $30,000			Income $30,001 - $75,000			
	Average Gap	# of Students	Total Gap (Millions)	Average Gap	# of Students	Total Gap (Millions)	All (Millions)
Colorado							
2-Year	$5,446	1,259	$6.86	$5,583	1,050	$5.86	$12.72
4-Year	$5,958	2,034	$12.12	$5,674	2,748	$15.59	$27.71
Total			$18.98			$21.45	$40.43
Indiana							
2-Year	$3,565	1,149	$4.10	$4,007	979	$3.92	$8.02
4-Year	$3,567	3,627	$12.94	$4,949	5,161	$25.54	$38.48
Total			$17.03			$29.46	$46.50
Louisiana							
2-Year	$7,218	3,027	$21.85	$6,736	1,188	$8.00	$29.85
4-Yr	$8,884	4,713	$41.87	$9,131	3,925	$35.84	$77.71
Total			$63.72			$43.84	$107.56
Massachusetts							
2-Year	$2,066	1,813	$3.75	$1,509	1,303	$1.97	$5.71
4-Year	$5,333	2,123	$11.32	$6,057	2,875	$17.41	$28.74
Total			$15.07			$19.38	$34.45
Minnesota							
2-Year	$6,992	1,607	$11.24	$5,648	2,016	$11.39	$22.62
4-Year	$2,552	973	$2.48	$2,620	2,141	$5.61	$8.09
Total			$13.72			$17.00	$30.72
New Jersey							
2-Year	$9,698	4,498	$43.62	$9,138	3,316	$30.30	$73.92
4-Year	$7,558	4,068	$30.75	$8,499	4,614	$39.21	$69.96
Total			$74.37			$69.52	$143.88
Oregon							
2-Year	$4,252	1,964	$8.35	$3,544	1,489	$5.28	$13.63
4-Year	$7,710	1,118	$8.62	$6,589	1,409	$9.28	$17.90
Total			$16.97			$14.56	$31.53
Rhode Island							
2-Year	$7,079	556	$3.94	$5,510	498	$2.74	$6.68
4-Year	$5,391	334	$1.80	$7,048	408	$2.88	$4.68
Total			$5.74			$5.62	$11.36
Washington							
2-Year	$1,111	2,021	$2.25	$1,063	1,537	$1.63	$3.88
4-Year	$498	2,026	$1.01	$626	2,900	$1.82	$2.82
Total			$3.25			$3.45	$6.70

Note: Totals may not sum to individual cells due to rounding. Estimates are based on the 2021-22 enrollment patterns for first-time, full-time students.

Source: Author's calculations from National Center for Education Statistics (2024)

In Colorado, for example, the state would need to provide $40 million based on the data from the 2021-22 academic year to close the gap for all enrolled Pell-eligible first-year, full-time students—a little under $13 million for two-year college students and almost $28 million for students in four-year institutions. The amounts required in the nine states ranged from under $7 million in Washington to $144 million in New Jersey.

It is important to understand that the numbers in table 3 represent the unmet need for only those students enrolled in each state and sector, and only for that one year. To get a better sense of the funding required to meet the need of these students not just in their year of entry into college but throughout their college careers as they persist through to a degree, I have extended the gap numbers from table 3 to estimate the total college affordability gap facing each state today.

To do this, two factors need to be taken into account: 1) the increase in college prices from September of 2021 to the current academic year; and 2) adjusting for the entire population of undergraduate students. While the former adjustment is very straightforward, the latter is more complicated. The primary issue is the assumption to be made regarding how long it takes to complete a degree.

Again, there is a wide body of research that has examined the degree completion trajectory of college students, including looking at different social, academic, and financial characteristics of the students and how these characteristics affect whether they earn a degree and how long it takes them to do so. From this research, we know that controlling for other factors, students' financial circumstances are strongly predictive of whether they earn a degree or not, and how long it takes do so. Higher-income students are more likely to earn a postsecondary credential and to do so more quickly than students from low-income families (Pretlow, Jackson, and Bryan, 2020; Bound, Lovenheim, and Turner, 2010; Chen, Caves, Pretlow, Caperton, Bryan, and Cooney, 2020).

The impact of poverty on degree completion is multifaceted. Certainly, students with fewer financial resources are going to struggle to stay enrolled in college in face of the affordability gaps documented here. But students from low-income backgrounds are also more likely to have weaker academic preparation, which also impacts whether a student will earn a degree or not (Chingos, 2018). This is because they are more likely to have lived in cities or rural areas, or specific neighborhoods within these communities, that have under-resourced elementary and secondary schools. These schools are less likely to have teachers qualified in their subject matters, pay lower teacher salaries (and thus are less likely to attract the best teachers), and lower budgets for curricular materials, supplies, educational enrichment, and the like (Carter and Welner, 2013).

There is also evidence that giving students a promise before they enroll in college that all of their costs will be met will entice students who currently do not enroll in postsecondary education to attend, or to attend a more expensive institution such as a four-year university rather than a two-year college (Heller, 2006). While it is impossible to determine exactly what the impact on college enrollment and persistence would be if a promise was made to students from low-income backgrounds that all of their college costs will be met without loans, some informed estimates can be calculated.

Table 4 presents four different budget scenarios with cost estimates for each. For each estimate, I first inflated the average gap numbers shown in table 3 by five percent, roughly the increase in two-year college (5.0 percent) and four-year public university (4.7 percent) tuition between the 2021-22 and 2023-24 academic years (Ma and Pender, 2023). Then, with these inflated cost estimates, I provide four scenarios:

1. **On-time graduation:** Funding necessary to close the affordability gap in each of the nine states for the 2021-22 levels of enrollment of students in both the up to $30,000 income group and those with incomes from $30,001 to $75,000, with these students graduating on time (four years in four-year institutions and two years in two-year institutions).

2. **Longer graduation time:** These students take longer to graduate, completing a degree in an average of five years at four-year institutions and three years at two-year institutions.

3. **On-time graduation plus enrollment increase:** Funding necessary to close the affordability gap in the nine states for the 2021-22 level of enrollment, plus an additional 10 percent enrollment, with the assumption that a promise of meeting the full college cost needs will draw additional students into college (either students currently not enrolling, or enrolling in college at a private institution or out-of-state) as well as funding students already enrolled but not yet receiving federal aid. Students will graduate on time.

4. **Longer graduation time plus enrollment increase:** The enrollment increase in scenario 3, plus these students graduate in an average of five years at four-year universities and three years at two-year institutions.

Table 4: Four Budget Scenarios for Closing The Affordability Gap ($ Millions)

	1: On-Time Graduation	2: Longer Graduation Time	3: On-Time Graduation + 10% Enrollment Increase	4: Longer Graduation + 10% Enrollment Increase
Colorado				
2-Year	$27	$40	$29	$44
4-Year	$116	$145	$128	$160
Total	$143	$186	$157	$204
Indiana				
2-Year	$17	$25	$19	$28
4-Year	$162	$202	$178	$222
Total	$178	$227	$196	$250
Louisiana				
2-Year	$63	$94	$69	$103
4-Year	$326	$408	$359	$449
Total	$389	$502	$428	$552
Massachusetts				
2-Year	$12	$18	$13	$20
4-Year	$121	$151	$133	$166
Total	$133	$169	$146	$186
Minnesota				
2-Year	$48	$71	$52	$78
4-Year	$34	$42	$37	$47
Total	$81	$114	$90	$125
New Jersey				
2-Year	$155	$233	$171	$256
4-Year	$294	$367	$323	$404
Total	$449	$600	$494	$660
Oregon				
2-Year	$29	$43	$31	$47
4-Year	$75	$94	$83	$103
Total	$104	$137	$114	$151
Rhode Island				
2-Year	$14	$21	$15	$23
4-Year	$20	$25	$22	$27
Total	$34	$46	$37	$50
Washington				
2-Year	$8	$12	$9	$13
4-Year	$12	$15	$13	$16
Total	$20	$27	$22	$30

Some of the amounts shown in Table 4 are relatively small, and appear within reach of a state that chose to commit to the goal of closing the affordability gap for students from low- and moderate-income families. For example, Washington would have to invest only an additional $30 million per year to achieve this goal, even assuming the most expensive scenario. Similarly, Rhode Island would have to invest only an additional $50 million per year.

For other states, however, the investment would be a much greater magnitude—in large part because college is already quite expensive in those states. New Jersey would have to invest an additional $449 million to $660 million annually, depending on the scenario chosen. While New Jersey, as noted earlier, has the highest median income of all the states, and thus presumably is in a better position to increase its funding in support of this goal, a relatively poorer state like Louisiana, which has a gap similar to that of New Jersey, would likely struggle more to find the funding.

Still, when the funding needed to close the college affordability gap is examined in the context of the commitments the states are already making to funding higher education, the additional amounts needed are not quite as daunting. **Table 5** uses the total additional funding required in each state (summing the two-year college and four-year sectors) found in Table 4, and combines it with the fiscal year 2022 funding for higher education and student aid in each state to calculate the required proportional increase in state higher education funding.[viii]

Table 5: Increase in Current Funding Required to Close the College Affordability Gap

State	FY22 Higher Education Funding ($ Millions)	1: On-Time Graduation	2: Longer Graduation Time	3: On-Time Graduation + 10% Enrollment Increase	4: Longer Graduation + 10% Enrollment Increase
Colorado	$1,358	11%	14%	12%	15%
Indiana	$1,884	9%	12%	10%	13%
Louisiana	$1,359	29%	37%	31%	41%
Massachusetts	$1,896	7%	9%	8%	10%
Minnesota	$1,758	5%	6%	5%	7%
New Jersey	$2,863	16%	21%	17%	23%
Oregon	$1,322	8%	10%	9%	11%
Rhode Island	$222	15%	21%	17%	23%
Washington	$2,413	1%	1%	1%	1%

Source: Author's calculations from table 4 and State Higher Education Executive Officers Association (2023)

In fiscal 2022, paralleling the academic year data covered in this analysis, both Minnesota and Washington could close the college affordability gap under all the scenarios described here with less than a ten percent increase in funding annually. For New Jersey, the state with the highest affordability gap, a funding increase of 16 percent to 23 percent would be required, depending on the scenario chosen. While these are large proportional increases, a combination of multiple funding sources as noted above along with a multi-year strategy for increasing funding toward closing the college affordability gap could make the goal more achievable.

It is important to note that even scenario 4, which assumes a 10 percent increase in enrollment and a longer graduation time for students, may be a low estimate. These estimates are based on the enrollment of full-

time students at each institution, and as noted earlier, two-year institutions have many students who enroll part-time (and are not included in these analyses). It is likely that many of these students, even with a promise of having their affordability gaps lowered or eliminated entirely, would still enroll part time due to family demands or other constraints. It is important to provide funding to eliminate the affordability gaps for these students as well as those attending full time.

Conclusion

Our society has long considered postsecondary education to be a vehicle for equalizing opportunity among disparate groups. When President Lyndon Baines Johnson signed into law the Higher Education Act of 1965 in the gymnasium of Southwest Texas State College—the college where he had received his own college degree 35 years earlier—he stated,

> To thousands of young men and women, this act means the path of knowledge is open to all that have the determination to walk it. It means a way to deeper personal fulfillment, greater personal productivity, and increased personal reward. This bill, which I will make law, is an incentive to stay in school. It means that a high school senior anywhere in this great land of ours can apply to any college or any university in any of the 50 States and not be turned away because his family is poor (Johnson, 1965).

While the nation has made progress on fulfilling the promise of the Higher Education Act, we still have a long way to go. Gaps in college enrollment and completion have persisted stubbornly over the last six decades. A report from the Pell Institute (2022), a non-profit think tank, demonstrated that there was more than a 30-point gap in the college enrollment rate of students from families in the highest income quartile as compared to those in the lowest income quartile. The report found similar gaps in degree completion, with 59 percent of students from the highest income quartile earning a bachelor's degree by age 24, while only 15 percent of those from the lowest quartile were able to do so. Gaps in college enrollment and degree completion across different racial and ethnic groups also exist in the nation. While these differences tend to be smaller than those of the income groups, and some progress has been made in lessening them over the years, they nevertheless have stubbornly persisted for decades as well.

Eliminating the financial barriers that students from low-income and moderate-income families face is a necessary, but not in and of itself sufficient, requirement for addressing these gaps in postsecondary educational opportunity. A starting point for addressing financial barriers is to have some understanding of the magnitude of the problem. This report accomplishes this by using data from the National Center for Education Statistics to estimate the magnitude of this gap in nine states who, by becoming members of the State Policy Network to Advance Debt-Free College, have expressed an interest in removing financial barriers in college enrollment and degree attainment.

It is also critical that additional state, federal, and private investments in higher education are done in a manner that maximizes the impact on low- and moderate-income students and students of color, those groups that have—as noted throughout this report—historically been the most disadvantaged in college and university enrollment, persistence, and degree completion. This means that those investments need to be targeted to these students and to the institutions they are most likely to attend.

For example, data from the Opportunity Insights project at Harvard University demonstrate that higher-income students attending public universities in most states tend to disproportionately enroll in the most selective institutions, typically the state flagship universities, while students from lower-income families tend to enroll in states' regional institutions (The New York Times, 2017). Thus, investing state appropriations in flagship universities is likely to have little impact on addressing the equity gaps described in this report; the funds instead should be invested in regional institutions, which generally are already funded at lower levels than flagship universities.

Similarly, federal, state, and institutional financial aid programs need to be designed in ways that target money at the most financially needy students. This is best accomplished by using financial means testing in the awarding of grant aid, rather than awarding the money based solely on measures of academic merit, which tends to benefit higher-income students.

It is unlikely that any one state would attempt to address the problem in a single state budget cycle. But setting a goal of addressing the college affordability gap over some number of years, with incremental progress to be made in each year, may make the effort more amenable to governors and legislators, who control the level of state budgets. Extending the effort by strengthening and expanding the partnership between states and the federal government, as well as bringing in private organizations, could help achieve the goal even sooner. It would also ensure its sustainability in years of well-funded state budgets and those of more constrained budgets.

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Endnotes

i. See the methodology appendix from the earlier *Closing the College Affordability Gap* report for more on these calculations.

ii. See for example Triventi (2014) and Bozick (2007).

iii. The federal IPEDS data provide information only for full-time students, even though many students, particularly in two-year institutions, attend part-time.

iv. The reason that the average cost of attendance is different between students from families with income up to $30,000 and those in the $30,001 to $75,000 group is because the mix of each group across institutions is different. If a larger proportion of the higher-income students attend more expensive two-year institutions in a given state, than their average cost of attendance will be higher than the lower-income students. The same is true, of course, with grant aid.

v. For more on college promise programs, visit the website of College Promise, http://collegepromise.org.

vi. For more details on these limitations, see the first *Closing the College Affordability Gap* report, https://ticas.org/affordability-2/new-report-examines-funding-needed-to-close-the-college-affordability-gap/.

vii. For two comprehensive studies reviewing this research, see Leslie and Brinkman (1987) and Heller (1997).

viii. The state funding shown here excludes any federal stimulus funds, so represents only each state's investment from its own budget resources.