





COLLEGE AFFORDABILITY DIAGNOSIS

NATIONAL REPORT





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Joni E. Finney

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FOREWORD

College Affordability Diagnosis is the most comprehensive state-by-state study of college affordability since 2008, when the last Measuring Up report was completed by the National Center for Public Policy and Higher Education.

College Affordability Diagnosis makes use of the most recent national data available from the National Center for Education Statistics that can be used to compare all states. It is a tool for assisting states in taking stock of college affordability and identifying the populations and institutions that are most severely affected by declines in affordability. State leaders are encouraged to add their own data to this analysis in order to better understand affordability challenges within their own state and how affordability varies within the state and for students of differing economic means.

Many states have adopted ambitious goals for college completion, but few have addressed the linkages between college affordability and student preparation, or the linkages between college affordability and student completion of certificate and degree programs. National organizations and some of their philanthropic partners have focused on college preparation and completion—both worthwhile goals. But even the most enlightened educational policies will not succeed for students who cannot afford to enroll or complete college programs.

The guiding perspective of college affordability in this study is tied closely to the economic circumstances of students and families. *College* affordability is defined as the percent of family income that would be required to pay all educational expenses, after financial aid, to attend college full time. To provide a realistic picture of affordability, we consider family income for families of different economic means, and we consider the educational expenses associated with attending all postsecondary institutional types. This study does not define college affordability policy based on what the "market can bear" or what other states or their peer institutions charge students. While these latter definitions might be interesting, they have little to do with what students and families of differing economic circumstances can afford to pay for higher education in their own states, which is where most students enroll.

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The **authors of this study** welcome the reactions of readers.

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LOSING GROUND

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College Affordability Diagnosis paints a sobering picture of college opportunity in the United States today: A postsecondary education is no longer affordable for many low- and middle-income students and their families.

- ➤ States have lost ground on college affordability. Even in the best-performing states, college is less affordable than it was in 2008.
- ▶ Student financial aid does not go as far as it used to. Many states have increased investment in need-based financial aid, but much of state aid is not based on financial need.
- ▶ Unlike in the past, most full-time students cannot work their way through college. Even at many public community colleges—long an entryway into higher education—students would have to work more than 20 hours a week to cover the costs of attending full time.
- ▶ Debt is often the only option for lowand middle-income students who want to attend college full time. As a major policy strategy, using loans to fill the gap between educational expenses and what students receive in financial aid raises

- significant concerns, especially for low- and middle-income families.
- ▶ Low- and middle-income families face significant economic barriers that limit their ability to invest in education. Many of these same families are already burdened with living expenses that consume most, if not all, of their annual incomes.

State policy makers often talk passionately about wanting to level the playing field. They make a great show of outlining goals for improving educational attainment—for the sake of both a strong civic culture and a robust economy. If they are serious about achieving these outcomes, they must make it a priority to increase the number of students from low- and middle-income families enrolled in college. To truly tackle this problem, policy makers must seek to lessen the financial burden of higher education on these families. Unless we make college affordable for people of all financial means, opportunity through higher education will be a false promise.

What Is Affordability?

While many have discussed increases in higher educational expenses, few have put these expenses into the context of what students and families actually earn—and are therefore able to afford. The graphics in this essay and the accompanying state profiles provide reasonable estimates of the educational expenses for students and families in each state. These profiles give state leaders a gauge of the relative financial burden for families of differing economic means to attend higher education full time.

In this report and the state profiles, *educational expenses* include tuition and costs of living while attending college less all grant-based financial aid from federal and state governments and institutions. We then calculate educational expenses as a percent of family income. We do this for the average cost of attending college in a state, for both public and private postsecondary institutions, to get a reasonable estimate of college affordability for families.

Educational Expenses = tuition + room/board + books – all financial aid as a percent of family income

College affordability is not the only policy that states must address to improve educational opportunity, but it is a particularly important linchpin for linking policies that better prepare students for postsecondary study to those that help them complete their certificate and degree programs. Despite lofty goals set by nearly all states, as well as major infusions of philanthropic dollars, the relatively flat higher education attainment rates over the last decade or so compel state leaders to look comprehensively at state policies to assist students in enrolling and completing certificate and degree programs.

States Have Lost Ground on College Affordability since 2008

As Will Doyle explains in his **essay** (later in this report) about the impact of price on college attendance, the consequence of losing ground

on college affordability for students of modest economic means is simple: far fewer of these students will enroll.

Between 2008 and 2013, some states lost ground on college affordability in their public two-year colleges, others in their public four-year nondoctoral institutions, and still others in their public and private four-year institutions. And the sad reality for students and families is that many states lost ground in all their public and private institutions.

In the public higher education sector, only 15 states improved on measures of college affordability for public two-year institutions; that is, in these states families would be required to pay a smaller portion of their income, on average, in order to attend full time. During the same period, public four-year nondoctoral colleges and universities and public research universities have become more affordable in only six states for each sector. Only four states improved on college affordability in more than one public sector of higher education.

In the private not-for-profit sector of higher education, seven states improved on measures of college affordability from 2008 to 2013. In these states, a smaller portion of average family income would be required to pay the costs of attending a private nondoctoral college or university,⁴ and in only seven states would a smaller portion of average family income be required to attend private research universities.⁵

These examples are part of a broader pattern: regardless of where states fall on current rankings of college affordability, all states have lost ground in some areas of college affordability since 2008. In 45 states, *overall* college affordability has declined since 2008.

College Affordability in States with a High Concentration of Low-Income Families

Low-income residents face enormous odds when it comes to paying for higher education.

For states to be competitive in the global labor market, they must increase the share of the population attending and completing higher education. This problem is particularly acute

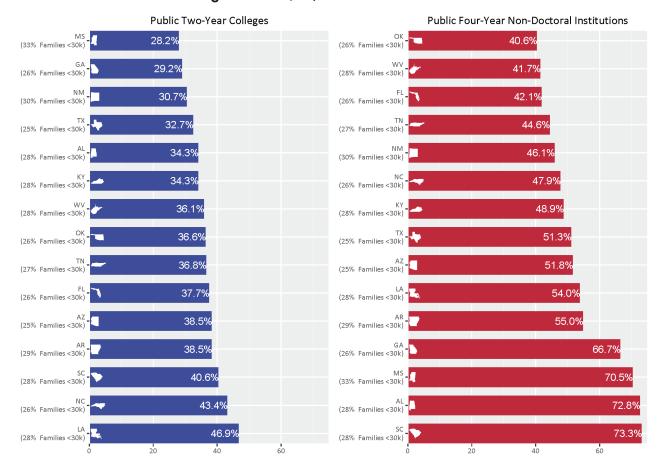
Twelve of the 15 states with the highest concentrations of poverty (see Figure 1) are also those with the largest concentration of Black and Hispanic families. State and national efforts to close the gaps in educational attainment between Whites, Blacks, and Hispanics will undoubtedly include making college more affordable for students and families living in these states. Not surprisingly, many of these states also have a high percentage of children living in poverty, signaling a long-term problem—and the need for long-term solutions—in providing affordable higher education.

in states with a high proportion of families who make less than \$30,000 per year. In these states, more low-income students will have to attend college than ever before in order to create a more educated and productive workforce.

Figure 1 shows what low-income students and families would be required to pay for postsecondary education in states with a high concentration of families making less than \$30,000. These low-income families would

be required to spend a range of 28 percent (Mississippi) to 47 percent (Louisiana) of annual family income, on average, to attend public two-year colleges. These same families would be required to spend from 41 percent (Oklahoma) to about 73 percent (South Carolina and Alabama) of annual average family income to attend a public four-year nondoctoral institution, and from 39 percent (Louisiana) to 89 percent (Alabama) of family income to attend a public research university.

Figure 1: Percent of Income Required to Pay for Education Expenses in States with a High Concentration of Families Making Less than \$30,000



If the same low-income families were to attend a private nondoctoral institution, they would be required to spend a range of 70 percent (New Mexico) to 144 percent (Arizona) of family income to attend. At private research universities, low-income families would be required to spend from a low of 40 percent (Tennessee) to a high of 139 percent (Florida) of family income to attend full time.⁶

Low-income families already spend more than what they earn to pay for living expenses (see "Economic Barriers" section later in this essay); requiring these families to make *any* financial contribution toward their educational expenses appears to be unrealistic and out of their reach.

College Affordability and Patterns of College Enrollment

Our findings make it clear that where you grow up can determine your opportunities for higher education. College costs, available aid, and institutional options vary dramatically by state, sometimes within the same region. The following sections highlight key college affordability findings by type of institution and family income level.

Public two-year institutions

States that historically enrolled most of their students in their public two-year institutions did so in order to provide access to affordable educational opportunities to a large portion of the population. Our analysis shows that public two-year colleges no longer serve as an affordable college option in most states.

As shown in Figure 2, 16 states educate 40 percent or more of their students in public two-year institutions. Several large states, such as Texas, Illinois, and North Carolina, educate about half of their students in public

two-year institutions. Of the states with a high concentration of students in public two-year institutions, only four decreased the portion of family income that would be required in order for a student to enroll full time between 2008 and 2013.8

For states with a high percentage of students enrolled in public two-year colleges, families in the bottom income quintile would be required to pay, on average, from 26 percent of their income (in Hawaii) to 62 percent of family income (in Minnesota) in order to enroll in this sector. For those families earning between \$30,001 and \$48,000 per year, between 13 percent (Hawaii) and 29 percent (Minnesota) of family income would be required to enroll in public two-year institutions. Families earning from \$48,001 to \$75,000 a year would be required to pay from 11 percent (in Mississippi) to 22 percent (in Minnesota) of income in order to enroll in this sector in 2013.

Public four-year nondoctoral colleges and universities

As shown in Figure 3, 16 states enroll more than 25 percent of undergraduate students in public four-year nondoctoral institutions. Students and families earning less than \$30,000 per year in these states would pay, on average, from 38 percent of family income (Alaska) to 76 percent of family income (New Jersey) to attend these colleges and universities full time. Those students and families earning between \$30,001 and \$48,000 per year would be required to pay, on average, from 20 percent (West Virginia) to 40 percent (New Jersey) of family income to attend full time. Those families earning from \$48,001 to \$75,000 per year would be required to pay between 16 percent (Alaska) and 33 percent (New Jersey) of family income to attend full time.

Figure 2: Percent of Income Required to Pay for College Expenses at Public Two-Year Colleges in States Where More than 40% of Students Enroll in These Institutions

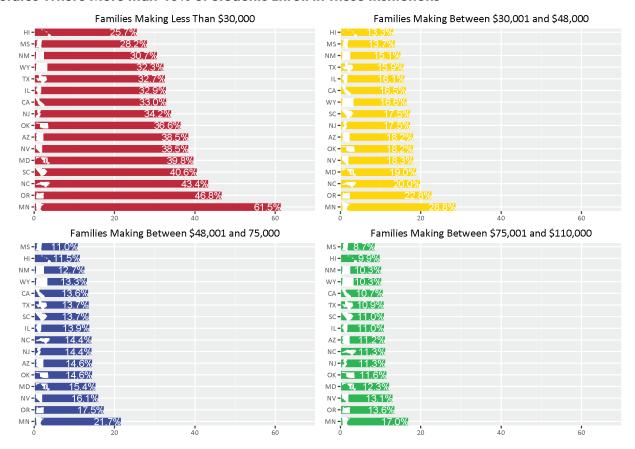
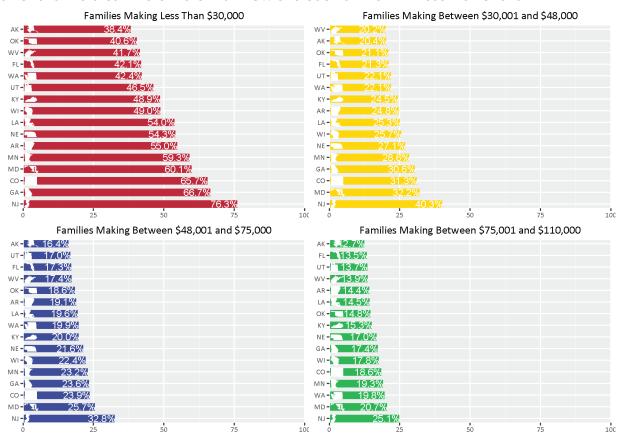


Figure 3: Percent of Income Required to Pay for College Expenses at Public Four-Year Nondoctoral Institutions in States Where More Than 25% of Students Enroll in These Institutions



Public research universities

As shown in Figure 4, of the 16 states in which at least 30 percent of students are enrolled in the public research universities, families earning less than \$30,000 per year would be required to pay from 41 percent (Indiana) to 89 percent (Alabama) of family income in order to enroll in this sector. Families earning from \$30,001 to \$48,000 per year would be required to spend anywhere from 23 percent (Indiana) to 42 percent (Alabama) of their income for these same institutions. Families earning from \$48,001 to \$75,000 would be required to pay, on average, anywhere from 17 percent (Wyoming) to 31 percent (Alabama) of family income to enroll in these institutions.

Private, not-for-profit nondoctoral colleges and universities

As shown in Figure 5, of the 15 states where at least 20 percent of students attend private nondoctoral colleges and universities, families earning less than \$30,000 per year would be required to pay, on average, from 37 percent (Idaho) to 159 percent (New Hampshire) of family income in order to attend full time. Families earning from \$30,001 to \$48,000 per year would be required to spend from 19 percent (Idaho) to 71 percent (New Hampshire) of their income. Families earning from \$48,001 to \$75,000 would be required to pay, on average, between 16 percent (Idaho) and 45 percent (Rhode Island) of family income to enroll in these institutions.

Student Financial Aid Has Lost Purchasing Power

Even with increased financial aid from the federal government, as well as from many states, educational costs impose a heavy burden on low- and middle-income families. Accounting for all federal, state, and institutional grant-based financial aid (including aid based on merit and financial need), the percent of family income

that would be required to enroll full time in a postsecondary institution has continued to increase across states in all sectors of higher education.

The national average for state need-based financial aid dollars per student increased between 2004 and 2013. Adjusted for inflation (2015 dollars) the national average in need-based financial aid at *public institutions* increased from \$235 per student in 2004 to \$311 per student in 2013 and *decreased* for students attending private colleges and universities (from \$477 to \$408). However, New Jersey, California, Illinois, Minnesota, North Carolina, Iowa, New York, Washington, and Indiana all provided over \$1,000 per student in 2013 for need-based financial aid for students to attend private colleges and universities.

Average state financial aid provided for reasons other than financial need at public institutions *increased* from \$189 per student in 2004 to \$268 per student in 2013 after adjusting for inflation. State financial aid provided for reasons *other* than financial need *declined* slightly at private institutions from \$285 to \$282 per student in inflation-adjusted dollars.

In "A New Federalism in Higher Education **Affordability**," (essay in this report) Will Doyle tells us that while states' provision of need-based financial aid at public four-year institutions barely changed from 1996 to 2012, state financial aid for high-income students at these same institutions skyrocketed by more than 450 percent. Since the mid-1990s financial aid programs in many states have worked at cross purposes with the need to provide education and training beyond high school to the large number of low- and middle-income families that struggle to make ends meet. Non-need state financial aid policies also run counter to federal financial aid programs that award dollars based on financial need. Greater public policy attention at both the state and federal levels is necessary to see more lowand middle-income students enroll in higher education.

Figure 4: Percent of Income Required to Pay for College Expenses at Public Four-Year Research Institutions in States Where More Than 30% of Students Enroll in These Institutions

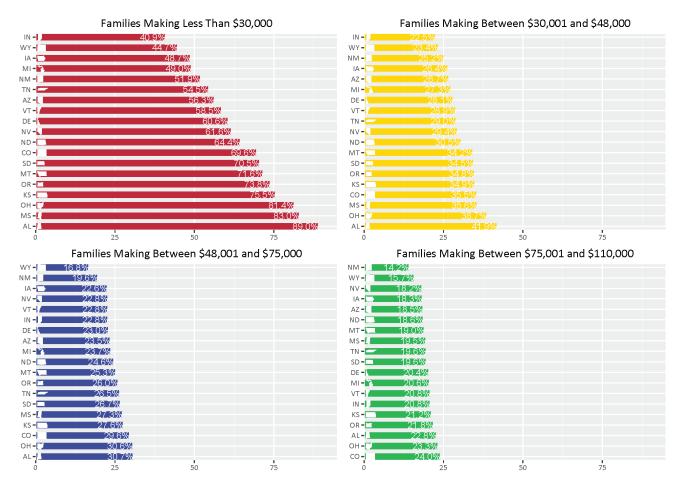
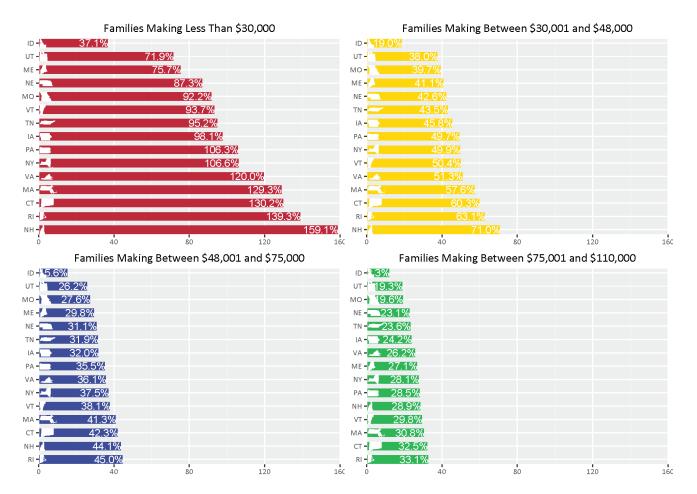


Figure 5: Percent of Income Required to Pay for College Expenses at Private Four-Year Nondoctoral Institutions in States Where More Than 20% of Students Enroll in These Institutions



Most Students Cannot Work Their Way Through College While Enrolled Full Time

The idea that most students can work their way through higher education while enrolled full time is a quaint notion from an earlier era. Research shows that students who work more than 15 to 20 hours a week are at risk of stopping or dropping out or do not benefit as much as other students who are engaged more intensely in academic work (see Will Doyle's "College Affordability" essay in this report).

In all states, students must work more than 20 hours a week to pay the educational expenses at public or private four-year colleges or universities.

Students in only 12 states can work their way through a public two-year institution while working 20 hours or less per week: Alabama, Arkansas, Connecticut, Georgia, Hawaii, Illinois, Kentucky, Michigan, Mississippi, Utah, Virginia, and West Virginia. However, in six of these same states, 25 percent or more of the population earn \$30,000 per year or less. So while it may be possible for students in these states to pay their educational expenses by working their way through college, many are already likely to be working to assist their families in making ends meet (see "**Economic Barriers**" section later in this essay).

To pay the educational expenses of attending a public nondoctoral college or university full time requires fewer hours of work per week than attending a public research university (35 and 41 hours of work, respectively).

To pay the educational expenses of attending a private nondoctoral college or university full time requires fewer hours of work per week than attending a private doctoral university (54 and 62 hours of work per week, respectively).

As low- and middle-income students make the decision to work more hours than recommended in order to pay for increasing educational

expenses, they often unknowingly make a tradeoff in educational opportunities. Specifically, working more hours decreases the likelihood that they will finish their programs. At the same time, it makes it more likely that they will miss opportunities for educational engagement that will help them compete in the job market. Highincome students are not faced with the same dire choices.

Debt Is Often the Only Option for Low- and Middle-Income Students to Enroll Full Time in Postsecondary Education

There is little to no agreement on how much students can or should borrow for postsecondary education. Any limits on borrowing are in place as a result of federal program restrictions for federal student loans or as a result of credit limitations for private loans. As a major policy strategy, using loans to backfill the gap between what students receive in financial aid and what it costs for them to attend full time raises concerns on two fronts, especially for low- and middle-income families. The first is that many students who borrow do not graduate, leaving them saddled with student debt but no degree. Therefore, examining the debt burden of college graduates (a common college borrowing statistic) tells us little about whether students borrow too much. Secondly, an in-depth examination of family budgets (see below) shows that low- and middle-income families have few discretionary funds, meaning that even a relatively short-term financial setback in these families can cause major disruptions in their lives. Adding an educational debt burden seems unusually harsh.

This is not to suggest that loans should be excluded as a strategy for making college affordable for students and their families. Loans should be a part of this strategy. But there is little policy debate or agreement about which students should borrow or how much constitutes too much for any given student.

In the majority of states (39) in 2013, borrowing is higher in public nondoctoral than in public research institutions. In addition, for the 26 states that have both private nondoctoral and private research institutions, borrowing in 2013 was higher in the nondoctoral colleges than in the private research colleges in all states. Public and private nondoctoral institutions serve more lowand middle-income Americans than do public and private research universities, and student borrowing in these institutions should be carefully monitored to ensure that those with family incomes of \$75,000 or less are not burdened with loans they are unable to repay.

Similar to many of the other college affordability measures, where one lives makes a striking difference in how much debt one must accumulate to earn a college degree. As shown in Figure 6, per-student borrowing to attend public two-year institutions in 2013 was lowest in California (\$247 per student) and highest in New Hampshire (\$5,134). In public four-year nondoctoral colleges and universities, Florida had the lowest per-student borrowing (\$1,990) and Mississippi had the highest (\$6,170). In public research universities, California had the lowest per-student borrowing (\$2,343) and Maine had the highest (\$4,870).

Figure 6: Average Loans Per Year, Lowest 5 and Highest 5 States

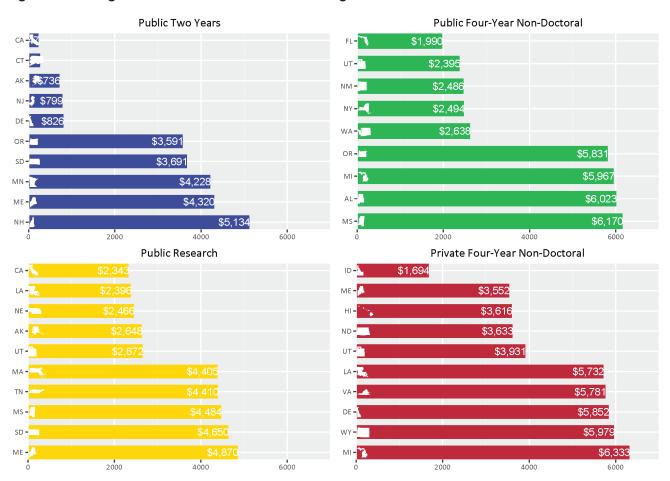


Table 1: Low- and Middle-Income Families Struggle to Make Ends Meet: Percent of Before-Tax **Income Spent on Expenditures by Income Category**

Low- and middle-income families must weigh significant trade-offs between attending college and getting a job. Limited family resources make it difficult for these families to invest in postsecondary education.

Income Categories*	\$10,000 to \$29,999		\$30,000 to \$49,999		\$50,000 to \$69,999	
Average Income before taxes	\$18,411		\$39,690		\$59,111	
Average annual expenditures	Amount in dollars	Percent of average income before taxes	Amount in dollars	Percent of average income be- fore taxes	Amount in dollars	Percent of average income before taxes
Total annual expenditures	\$27,411	149%	\$40,811	103%	\$51,242	87%
Major Household Spendin	g Categories	;				
Food	\$3,948	21%	\$5,565	14%	\$6,486	11%
Housing	\$10, <i>7</i> 90	59%	\$14,339	36%	\$17,028	29%
Apparel and services	\$831	5%	\$1,420	4%	\$1,602	3%
Transportation	\$4,497	24%	\$7,362	19%	\$9,488	16%
Healthcare	\$2,587	14%	\$3,624	9%	\$4,702	8%
Entertainment	\$1,246	7%	\$2,050	5%	\$2,548	4%
Education	\$556	3%	\$487	1%	\$764	1%
Other Expense Categories	\$2,957	16%	\$5,964	15%	\$8,622	15%
Alcoholic beverages	\$177	1%	\$288	1%	\$385	1%
Personal care products and services	\$349	2%	\$505	1%	\$570	1%
Reading	\$60	0%	\$79	0%	\$92	0%
Tobacco products and smoking supplies	\$295	2%	\$338	1%	\$356	1%
Miscellaneous	\$361	2%	\$652	2%	\$833	1%
Cash contributions \$7		4%	\$1,278	3%	\$1,643	3%
Personal insurance and pensions	\$916	5%	\$2,825	7%	\$4, <i>7</i> 43	8%

^{*}Original source data lists income in \$5,000 to \$10,000 ranges. Two of the income brackets in this table were constructed by combining several income brackets (for example: \$30,000-\$39,999 and \$40,000-\$49,999) and creating an average for the newly created income bracket.

Source: Consumer Expenditure Survey, U.S. Bureau of Labor Statistics, 2014: Table 1202. Income before taxes. Note: Households receiving workers compensation and federal disability are included income figures, but SNAP and other welfare programs are excluded. For complete information about the survey and definitions of income categories see: http://www.bls.gov/cex/csxgloss.htm#inc

Low- and Middle-Income Families Face Significant Economic Barriers That Limit Their Ability to Invest in Education

The percent of family income required to pay for college is exacerbated by the strain on family budgets (see Table 1). A better understanding of family budgets within each state can help policy makers understand the pressure on low- and middle-income families when determining annual tuition and financial aid policies. To establish tuition and financial aid policies absent this understanding is similar to a governor or state legislator passing a state budget without a careful eye on expected public revenues.

The "new normal" is that family and household earnings have grown little over the last decade and that nearly half of all households experience substantial volatility of income (a drop or gain by 25 percent or more) during any two-year period. Furthermore, most lower income families can replace about two weeks' worth of income through savings and checking accounts. The picture is not much brighter for middle-income families, who can replace about four months of income through savings as well as retirement funds.¹¹

Table 1 shows that families or households earning from \$10,000 to \$29,999 per year spend nearly 149 percent of their pretax income to pay for living expenses. Families earning approximately \$30,000 to \$49,999 per year spend about 103 percent of their pretax income for living expenses. These families are already living on debt or some form of undeclared income to try and pay for basic living expenses. Families earning \$50,000 to about \$69,999 per year spend, on average, 87 percent of their pretax income on living expenses. To expect these families to pay the portion of their income that most states would require to enroll even in the least expensive institutions seems unwise. Equally unrealistic is to expect them to go into debt, given that living expenses already exceed or are close to exceeding their family income. Even borrowing

no more than the average level of debt for college graduates appears risky.

Conclusion

College Affordability Diagnosis shows how the deck is stacked against low- and middle-income Americans when it comes to paying for college. Sadly, this problem can only worsen when projecting into the future. The states with large minority populations, including large numbers of minority youth, are in general those with a large portion of families earning less than \$30,000 per year. These facts, combined with economic forces that require more education and training beyond high school to prevent downward economic mobility, ¹² paint a picture that is not bright for many Americans.

Unless state and federal policy makers act together to ensure that educational opportunities beyond high school are affordable, it would not be surprising to see greater economic and racial stratification reflected in our colleges and universities—as well as society.

The five policy findings from College Affordability Diagnosis show how much the country must do to ensure that students and their families are able to pay for college. Workforce demands, documented in each state profile, as well as the large portion of family income that would be required to pay educational expenses, require a concerted public policy response.¹³ At stake is not only a competitive economy but also an equitable society—one that is not sharply stratified by race and income. Higher education policies are not the only response required to address the need for a competitive economy and social equality, but higher education is one of the strategic policy tools that policy makers can use to ensure greater opportunity and prosperity for all Americans.

At times our nation has called upon citizens to work together to improve opportunities for education and training beyond high school for the next generation. It's not too late to make sure that the benefits passed along to those of us who have already gained from higher education are passed along to those who come next.

Endnotes

- 1 Arkansas, Arizona, California, Colorado, Delaware, Georgia, Indiana, Michigan, North Dakota, New Hampshire, New Mexico, Oklahoma, Tennessee, Utah, and Washington.
- 2 Public nondoctoral institutions have become more affordable in Alaska, Florida, Indiana, Kentucky, Montana, and Ohio. Public research universities have become more affordable in Alaska, Iowa, New Jersey, Oklahoma, Washington, and West Virginia.
- 3 Alaska, Indiana, Oklahoma, and Washington.
- 4 Colorado, Delaware, Hawaii, Indiana, Kansas, New Jersey, and New Mexico.
- 5 Colorado, Connecticut, Delaware Illinois, Maryland, North Carolina, and Rhode Island.
- 6 Of the 15 states with at least 25 percent of families making \$30,000 or less, only six had private research universities: Florida, Georgia, North Carolina, Oklahoma, Tennessee, and Texas.
- 7 Among the states with a large concentration of families making \$30,000 or less, only Kentucky, Oklahoma, and West Virginia do not also have high concentrations of Black and Hispanic families.
- 8 The four states with over 40 percent of their total higher education enrollment in public two-year institutions that decreased the percent of family income that would be required to pay for public two-year institutions are Arizona, California, New Mexico, and Oklahoma.
- 9 AK, AL, AR, AZ, CA, CO, CT, DE, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, NC, NE, NH, NJ, NV, OH, OK, OR, PA, SC, TX, VA, VT, WI, WV; data on WY was missing for the public nondoctoral sector.
- 10 The following states had both private nondoctoral colleges and private research colleges: CA, CO, CT, DE, FL, GA, IL, IN, LA, MA, MD, MI, MN, MO, NC, NH, NJ, NY, OH, OK, PA, RI, TN, TX, UT, WI.
- 11 Susan K Urahn and Travis Plunkett, "The Precarious State of Family Balance Sheets" (Pew Charitable Trusts report, January 2015), http://www.pewtrusts.org/en/research-and-analysis/reports/2015/01/the-precarious-state-of-family-balance-sheets.
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COLLEGE AFFORDABILITY: A STATE POLICY FAILURE?

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This state-by-state and national diagnosis of the condition of college affordability documents a bleak but compelling assessment of the financing of American higher education from the perspective of students and families.

Individual opportunity and national prosperity require major increases in the proportion of Americans who enroll in and complete programs of education and training beyond high school. Policy makers and higher education leaders have tended to underestimate the effort and magnitude of change needed to accomplish the increases in higher educational access and attainment that will ensure an internationally competitive workforce, a robust middle class, and social mobility.

The deterioration of college affordability constitutes a major impediment to national and state efforts to raise levels of attainment by improving college access and completion rates. These gains cannot be realized without increasing the participation rates of students from low-income families as well as of racial and ethnic groups who are poorly represented in colleges and universities but constitute a growing portion of elementary and secondary enrollments. These are the populations whose college prospects are most severely damaged when college affordability is undercut.

The findings of this report support the conclusion that the first step in restructuring higher education finance must be taken at the state level, and that affordability should be the first and most urgent agenda. Federal and institutional reforms will be necessary, and many of these reforms must go well beyond the issue of affordability. Even as states' contribution to higher education has decreased, they remain the primary providers of higher education. And, as Will Doyle has pointed out in his essay "A New Federalism in Higher Education Affordability," it is at the state and institutional levels that affordability and historical assumptions about responsibility for ensuring affordability have deteriorated.

As states grapple with college affordability, there are some lessons to be learned from the policies and practices that contributed to these current outcomes:

- ▶ State policies should ensure that tuition increases are moderate, gradual, and predictable. In the absence of explicit and transparent policies and methodologies for adjusting tuition, increases are usually the unarticulated default policy.
- ▶ In considering tuition increases, state policies should ensure that the impact of proposed tuition on student indebtedness is taken into account.

- ▶ Statewide median family income and the net price of college attendance for students of varying incomes should be weighed heavily in methodologies for setting and adjusting tuition levels, as should the availability of need-based student financial aid from all sources.
- Two past approaches to establishing tuition policies have proven ineffective and even counterproductive and **should be avoided.** The first is to rely on comparisons with peer or neighboring states and institutions. This approach fails to recognize that family income and demographics vary considerably from state to state, as do commitments to needbased student financial assistance. What may constitute affordability in one state may be unaffordable in another. The second failed approach, one that can be intuitively and politically attractive but has proven unsustainable in practice, is to link tuition to proportions of cost per student or instructional costs to be borne by students and the state respectively. The implementation of this approach would require increases in tuition when state appropriations increase and reductions when appropriations are cut. These "fair share" policies have been almost universally ignored or suspended when higher education budgets are reduced. Another drawback is they often lead to interminable wrangling over definitions of educational costs, which has little relation to what people can afford.
- It is critical that states ensure coordination of all the core financial components of access and affordability: institutional appropriations, tuition, and all sources of student financial aid. All too often these elements function as "trains on their own tracks" with no venue in the policy or oversight process where they are considered as interrelated components of state college

- affordability strategies. In addition, states should examine the relative share of state support allocated to institutional appropriations and student financial aid, respectively, and seek a ratio that optimizes access and affordability.
- Many states could benefit from "checks and balances" in the tuition adjustment process. States are responsible for statewide college access and affordability and should not abdicate this role. Governors and legislatures are often reluctant to agree to tuition increases when they are appropriate and justified. College and university leaders are often under such intense pressure to maintain or increase resources that they advocate tuition increases that exacerbate affordability problems, including student debt. Whether formally or informally as part of the appropriations process or through some established process, a system of checks and balances might mitigate this tension. One approach is that the legislatures could set parameters that ensure statewide affordability, providing flexibility for individual institutions and multicampus systems within those boundaries.
- State tuition policies should be "stress tested" to ensure that they can be maintained under varying economic circumstances, even if they include provisions for emergencies and for **restoration.** One problem with many previous state efforts to develop tuition policies is that they have been put in place in times of economic recovery, in the wake of recessions and steep tuition increases. These policies usually failed to take the inevitable future recessions into account. Experience has taught us that good intentions and enlightened policy are often not sustainable when state revenue and appropriations fall on hard times.
- Tuition freezes, while sometimes defensible to provide a reprieve after

several years of precipitous increases, should take into account underlying cost structures. These freezes have typically been implemented after successive large jumps in tuition and often perpetuate underlying affordability problems. States have usually financed these freezes with appropriations that "buy out" projected or proposed increases in years when the economy and state revenues have begun to recover. These well-intentioned initiatives do not address the underlying cost structures, which must be considered as part of the long-term state and institutional strategy for access and affordability. While protecting currently enrolled students, freezes are normally followed by steep tuition increases when economic circumstances change and states can no longer afford the buy downs. These freezes have often contributed to the boom-bust cycles of tuition in which some students get relief, usually in times of relative prosperity, and those who come after them pay a premium.

Solutions to the national and state access and affordability issues should avoid inadvertently exacerbating the institutional stratification of students by income, race, and ethnicity that is now a pronounced characteristic of American higher education. For example, while experiments with free community college should be encouraged, these programs should be structured to avoid encouraging eligible students whose educational aspirations and qualifications might be better suited to four-year colleges to enroll in community colleges solely because of price. This issue could be addressed by careful construction of student financial aid programs to neutralize net price for these students or, as the Truman Commission recommended, by extending the free tuition initiatives to lower divisions at all public colleges and universities in the state.

The policies and practices that were tried under very different societal and educational circumstances in the late 20th century were not designed and will not be easily adapted or afforded under very different current circumstances: most Americans need to enroll in and complete programs of education and training beyond high school, and the economic success of the states and the nation depends upon the expansion and effectiveness of higher education. But policy makers and higher education institutions have generally not engaged in this larger conversation, even as evidence has accumulated, including the analyses offered in this report, that higher education is underperforming in relation to the nation's needs. One major symptom and consequence of that underperformance is the deterioration of affordability of higher education documented here. What is called for is the rethinking of higher education access and opportunity, the ways it can be provided and made affordable in the 21st century, and the costs and allocation of responsibility for paying for college. What we need most is purposeful state policy leadership.

A NEW FEDERALISM IN HIGHER **EDUCATION AFFORDABILITY**

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Under two successive US presidential administrations spanning 15 years, the Pell grant program expanded by \$19 billion. And yet the net price of higher education—the amount of money students are required to pay to attend college—stands at an all-time high. 1 How could the federal government have spent so much to achieve so little in its efforts to ensure that every qualified student can afford to attend college? Much of the fault lies not within the federal government itself, but in the lack of meaningful support from many state policy makers or institutional leaders. It's time for a new compact among the federal government, states, and postsecondary institutions to once again make college affordable for students and families.

For many years, the federal government, states, and institutions worked together to ensure that qualified students could attend college. Their cooperation was based on the following set of assumptions about the role each would play in ensuring college affordability:

- The federal government would provide needbased grant aid in the form of direct funding to students.
- State governments and institutional leaders would keep tuition at public open-access institutions low.
- State financial aid programs would reinforce federal programs and help with student choice.
- Institutions would provide aid to ensure that any student admitted into college could afford to attend.

Only the federal government has kept its part of the bargain. States and institutions have drifted away from their previous commitments.

For many years, state and institutional policies ensured that tuition was kept low at open-access institutions, including community colleges and public four-year institutions. But that all began to change after the turn of the 21st century. Between 2000 and 2015, average yearly tuition at public four-year institutions increased 81 percent, from \$4,688 to \$8,494.2 At community colleges average yearly tuition went from \$2,352 to \$3,521, a 50 percent price hike.³ Since the Great Recession and its aftermath, most of the tuition increases have occurred after rapid declines in state funding for higher education. But tuition also increased when state appropriations were going up. For example, between 2004 and 2008, state support for higher education per student increased

by 7 percent, but this did not keep tuition at public four-year institutions from continuing to increase—tuition went up by 10 percent during this same time period.⁴

These increases in tuition might not have affected college affordability if states had at the same time invested in need-based financial aid for students attending college. Instead, to the extent that states have invested substantially in financial aid, they have done so to provide funds to students who would have gone to college anyway. For low-income students at public four-year institutions, the average amount of state financial aid barely budged between 1996 and 2012—increasing from just \$690 to \$710—during a period in which tuition at public four-year institutions nearly doubled. During this same period, state financial aid to high-income students attending these same institutions increased by more than 450 percent.⁵

This leaves institutional aid—the grants and scholarships institutions provide directly to students—as the last resource for ensuring that qualified students can afford higher education. Institutional aid stands as the largest form of financial aid—a total of \$39 billion was spent on institutional aid in 2014–2015. Traditionally, institutions were expected to cover the difference between what the federal government and state governments provided in grant aid and what college expenses would be for any given student. It was assumed that the institution's role should be to find a way for admitted students to be able to afford to enroll. Instead, many institutional leaders have used their financial aid to compete for academically capable students, essentially spending their resources to influence where a student goes to college, as opposed to whether or not the student could attend at all. Between 1996 and 2012, institutional aid for low-income students (those with family incomes of less than \$25,000 per year) at private four-year nondoctoral institutions increased from \$2,900 to \$7,700 an impressive 160 percent improvement. ⁶ But the increase in money institutions spend on low-income students pales in comparison with the increase in money institutions spend on

high-income students. During the same period, institutional aid for high-income students—those whose families earn above \$125,000 annually—increased by 260 percent, from \$1,950 to \$6,400.⁷

Federal policy needs to reflect the new reality of student financial aid. The assumptions on which the current system was based no longer apply. The federal government has expanded its commitment to ensuring that students can afford to attend higher education. The problem is that many state and institutional leaders no longer see it as their role to be meaningful partners in the federal government's efforts.

What would a new federalism look like? It would begin with the federal government recognizing that state and institutional leaders will require incentives to get them to act as meaningful partners in ensuring that students and families can afford higher education.

For states, a new federal program could involve redirecting existing federal student financial aid programs like the Pell program through the states, provided the states match federal spending at a certain level and meet certain criteria in the awarding of financial aid. The most important criteria would be that the aid is need based, but states would have flexibility in designing their student financial aid systems to reflect their own needs. For instance, states could provide additional resources for students attending community colleges or for students transferring from one institution to another. A student who lives in a state that refuses to participate in the joint federal-state program need not be penalized. Instead, that student could continue to receive direct funding from the federal government.

For institutions, a new federalist approach to student financial aid would mean incentives for again being meaningful partners in providing that aid. These incentives could be for enrolling a certain proportion of low-income students or for awarding financial aid in a way that ensures that all admitted students could enroll without taking on debt.

Such an approach would not need a substantially larger expenditure of federal funds than the current amount. But it would require a new structure for this funding, one that provides every reason for state policy makers and institutional leaders to again be strong partners in ensuring that all students can afford to enroll and succeed in higher education.

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COLLEGE AFFORDABILITY: What the Research Says

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Researchers have been examining the impact of price on college attendance for nearly 50 years. In study after study, they have found that increasing the price of higher education results in fewer students going to college who otherwise would have. Our best estimate is that for every \$1,000 increase in the price of higher education, 3 percent fewer students enroll.¹

Policy makers should be concerned about two questions prompted by this finding. First, does increasing the price really *change* enrollment? Second, if increasing the price of attending college does change enrollment, how is it that we see large increases in enrollment at the same time as prices have been going steadily up?

The first question concerns the causal link between enrollment and the price of higher education. It could be that the observed link between changes in enrollment and changes in price doesn't indicate a causal relationship at all, but instead is merely coincidental. Researchers have attempted to establish the causal link between enrollment and the price of higher education in a variety of ways. In one of the most famous studies on this topic, University of Michigan economist Susan Dynarski looked at the impact of the elimination of Social Security benefits for children who had lost a parent. Between 1965 and 1982, Social Security benefits were extended through age 22 for young people who had lost a parent if they continued to enroll in school. In 1980, these benefits were substantial: \$6,700 per year, which was equal to average annual tuition at private colleges at the time. In 1982, these benefits were withdrawn. The enrollment effects were clear: when the benefits were withdrawn, enrollment rates among the affected group dropped from 63 percent to 32 percent, while the change in the unaffected group declined slightly, from 54 percent to 49 percent. This represents a 26 percentage point difference.² This kind of "natural experiment" has been repeated by other analysts in different settings, leading to a remarkably stable finding: changes in the price of higher education lead to fewer students enrolling, a link that has been clearly established as causal.³

This answer leads to the second question: if we know that increases in the price of higher education lead to lower enrollment, how can we have seen increases in both prices *and* enrollment over the last three decades? The answer has to do with the competing pull and push from the labor market and changing prices. The payoff for postsecondary education has continued to increase over time, pulling more students into

higher education.⁴ Today, having some college education (not necessarily a bachelor's degree) is a prerequisite for a middle-class lifestyle. This powerful signal from the labor market has pulled more and more young people into postsecondary education. Yet increasing prices have still pushed out people who would have benefited from going: thousands of young people who could benefit from more postsecondary education are priced out of college each year.⁵ Harvard economic historians Claudia Goldin and Lawrence Katz have found that the number of students enrolling falls well short of the number that the labor market demands.6

State leaders in many states have set ambitious goals for postsecondary education. These goals often specify that a certain percent of the population will have some level of college attainment. To achieve these higher The total amount

levels of attainment, colleges and universities will have to become much better at ensuring that students who enroll can achieve their educational objectives and graduate. Even with substantial increases in student success rates. no state will be able to

achieve an ambitious attainment goal without substantial increases in postsecondary enrollment. These increases in enrollment must come from populations that traditionally have not gone to college, including low-income students and members of racial or ethnic groups that have low enrollment rates, since there are no further increases in enrollment to be had from other groups.

The single best tool that we have for ensuring that more students enroll is lower prices. Research has shown that low-income students are actually more responsive to changes in price than their peers, indicating that reducing the price for lowincome students can create the largest enrollment

effects for a given amount of funding.⁷ This finding suggests that need-based aid provides the most efficient means with which to increase overall enrollment levels.

What about students who continue to enroll even after prices increase? When college prices go up, students are faced with a set of bad options. They can take fewer credits—which will lower the price for a given term. They can work more to be able to cover the increases in college expenses. Or they can borrow more money. Long-term trends in higher education have shown that students have done all three in order to cover college costs.8

The problem with these options is that both working and taking fewer credits can hurt a student's chances of completing their college

of student debt

now stands at \$1.3

trillion, more than

all car loans or

credit card debt.

education. Research has shown that taking fewer credit hours reduces the probability of successful completion.9 Of course, some students must attend part-time in order to enroll at all, but taking even one fewer course in a semester can harm a student's longterm chance of reaching his or her educational goals.¹⁰ Working long hours while

enrolled in higher education can have a negative impact on a student's chances of completing a degree as well. Working part-time on campus may actually be a positive for many students, but off-campus work that exceeds 20 hours a week appears to substantially reduce a student's chance of completing college.¹¹

The impact of debt on student outcomes is less well understood, but we have engaged in a societal-level experiment in financing higher education through increased student debt. The total amount of student debt now stands at \$1.3 trillion, more than all car loans or credit card debt. We do not know what the long-term impact will be of asking students to borrow more to finance their higher education. We do know that,

contrary to many reports, the risk of default is actually highest among students with relatively low debt burdens. That's because many of these defaults are by people who have left college with no degree or certificate and are struggling in the labor market.

Lowering the price of higher education has been proven to increase enrollment rates. In fact, few other tools at our disposal are as effective in increasing both access and attainment. Continuing on our current path of increasing college prices will lead to fewer students who could benefit from higher education—a result that directly contradicts state leaders' goal of increasing postsecondary attainment.

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CULTIVATING INNOVATION: Promising State Policies and Programs for Increasing College Affordability

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Constrained state budgets paired with the demand for a more educated workforce have encouraged many states to experiment with new policy approaches to make college more affordable for students and families. These innovative programs attempt to balance affordability while maintaining educational quality, program access, and student retention and completion. This essay examines a number of these promising policies and programs, with the goal of encouraging state policy makers to consider adopting them in their own states. Some of the innovations have strong research supporting their efficacy, while others show promise but still need to be evaluated carefully.

The innovative programs examined below fall into two broad categories. The first are programs that enhance educational productivity by accelerating the rate at which students move through the educational pipeline. These programs make college more affordable by allowing students to complete college efficiently and without having to spend extra time and money on education because of repeated coursework or lack of preparedness. The second set of programs enhance student affordability by reducing costs to students either through the provision of financial aid or through reduced or eliminated tuition or other costs.

Increasing College Affordability by Enhancing Educational **Productivity**

A number of states have implemented programs to aid students in getting through college efficiently. Some of these programs tackle educational productivity before a student arrives in college, ensuring that secondary education is providing the proper level of preparation for students so that they are ready for collegelevel coursework without needing remediation and without needing to repeat courses. Other

programs aim to decrease time to degree and student costs by providing college-level education and credits before the student has left high school. A third approach is to make the transfer process from community college to four-year institution more efficient, allowing students to complete coursework at the less-expensive two-year institutions and ensuring that those courses will count toward their baccalaureate degree. Finally, a number of states are creating pathways for adults who did not complete college to re-enter college and use some of the skills and knowledge they have acquired in the workplace toward completing their college credential. Allowing

adults to apply workplace knowledge to collegelevel courses enables many of them to complete a college degree more efficiently, at less cost, while maintaining their employment. Through all these programs, states are endeavoring to increase the educational attainment of the state population while keeping higher education costs affordable.

Programs Targeting Students Before Entry into Higher Education

Increasing high school student preparation reduces the need for remedial education and course repetition. States are approaching this in a number of ways, including providing options for high school students to earn college-level credit, creating Early College High Schools, and administering college placement exams during high school—usually referred to as early assessment.

Awarding college credits during high school is not necessarily a new approach. Advanced Placement tests and the International Baccalaureate Program have been operating for decades; however, some new models—including dual/concurrent enrollment and Early College High Schools—enable students to leave high school with a postsecondary credential in hand.²

Early College High Schools partner with colleges and universities to offer enrolled students an opportunity to earn an associate's degree or up to two years of college credits toward a bachelor's degree during high school at no or little cost to the students.³ A 2013 evaluation of Early College High Schools by the American Institutes for Research found significant increases in college enrollment and completion among participants.⁴ Early College students were more likely to enroll and graduate from college, and Early Colleges appeared to mitigate the traditional educational attainment gaps between advantaged and disadvantaged students.⁵

Another method for improving college readiness is through early assessment of high school students in order to make sure that they are leaving high school prepared for a college curriculum. In 2003, California State University, in collaboration with the California Department of Education and the state's public schools, pioneered the first early assessment program (EAP), which is now considered a national model. The California EAP gauges high school students' academic preparation for college and establishes a course that underprepared high school seniors can take to help them reach proficiency before graduating.⁶ A 2012 study of California's EAP by Policy Analysis for California Education found that participation reduces the average student's probability of needing remediation at California State University by 6.2 percentage points in English and 4.3 percentage points in mathematics.7

Other states are implementing early assessment programs in conjunction with two national assessment organizations, the Smarter Balanced Assessment Consortium (SBAC) and the Partnership for Assessment of Readiness for College and Careers (PARCC). Both assessments provide information to educators and students about college readiness and help educators identify appropriate college preparatory courses for students through the end of high school. In 2015, approximately 6 million students in grades 3 through 8 participated in SBAC, and PARCC participation reached 5 million students that same year.8 As these assessments are refined and improved upon, they offer students and the state a better gauge of how well high schools are preparing young people for postsecondary education. Programs that enhance student preparation for higher education can help make college more affordable for students by reducing the number of college credits that students have to take in college or minimizing the likelihood that the student will need to take remedial noncredit courses. In addition, these programs improve educational efficiency by increasing the likelihood that a student will successfully complete a degree instead of emerging from college with no degree and substantial student loan debt.

Programs Decreasing Time to Degree Through Streamlined Pathways

Transfer programs, when implemented well, can improve educational productivity by creating seamless pathways to four-year institutions and reducing credit repetition. Statewide studies show that many students lose credits or need to re-take courses after they complete the transfer process. Creating statewide transfer agreements provides a smoother transition for students across public institutions and systems in the state. Six states— Florida, Maryland, Oregon, Tennessee, Texas, and Virginia—have enacted statewide transfer since 2011. Legislation that guarantees transfer of an associate's degree into a four-year institution has also been on the rise. Both California and Oregon passed legislation requiring guaranteed transfer of an associate's degree. Thirty-five other states enacted some type of policy before 2011 requiring guaranteed transfer, although it may not be statewide and apply to all public institutions.

Guaranteed transfer policies take various forms. Some guarantee that a specific number of credits will be applied to four-year public institutions in the state, without the loss of credit. Other policies guarantee that transfer courses in specific majors will transfer without loss of credit or that students will transfer at the junior level in their course of study. Programs like these, which allow students to complete part of their bachelor's degree coursework while at a two-year college, ease students' financial burden since most two-year schools are less expensive.9

Increasing student course loads is another policy states are encouraging as a way to help students complete sooner. Recent research has shown that the more courses students take (and pass) the more likely they are to graduate.¹⁰ Hawai'i pioneered research on the 15-credit model and implemented a "banded tuition model" across the four-year colleges and universities, which makes taking 15 credits per semester cost no more than taking 12 credits per semester. This initiative,

called "15 to Finish" has been replicated in many other states. Hawai'i's research on 15 to Finish found that college students who complete at least 15 credits per semester are more likely to graduate on time, perform better academically, and save money on their college degree. Since implementing the model, the University of Hawai'i system has seen notable increases in the number of students taking at least 15 credits per semester and reports that retention rates are 22 percent higher for incoming freshmen who fall into this group. 11 Programs like these that help students complete college on time can provide significant savings to students and their families, particularly if they are accompanied by state financial aid policies to support full-time enrollment.

Programs Providing Affordable Pathways for Adults and Nontraditional Students to Return to College

States are also attempting to increase educational attainment by targeting nontraditional students, including older adults who do not have a baccalaureate degree. The research shows that states will not be able to drastically increase the educational attainment levels of their populations without reaching out to older re-entry students. 12 Creating solutions that will work for these reentry students presents its own set of challenges, as these students are often pursuing a college education while maintaining a job or meeting family commitments. Re-entry students also are entering postsecondary education with prior experience that may or may not be relevant to the new credential or degree they are seeking. Some state programs targeting nontraditional students adapt the course delivery to accommodate students who have time constraints, through course redesigns, while other programs assist students in obtaining college credit for skills or knowledge they have gained outside of higher education, through competency-based education and prior learning assessment, which allows students to complete a degree in less time.

Program redesigns have changed the way college courses are delivered. Courses in redesign programs can be delivered online, through hybrid (online and in-person) programs, or through redesigned courses that better utilize technology in the classroom, grading, or course format. Course redesign can also reduce costs for the institution and the student by reducing course repetition.¹³

Competency-based education (CBE) and prior learning assessment (PLA) improve educational efficiency by rewarding credit based on student learning instead of seat time in class. PLAs grant students credit for content that has been mastered previously, while CBE courses grant credit based on mastery of skill or knowledge. These programs occur either at institutions that specialize in CBE, like Western Governors University, or through institutions that offer CBE programs and/or PLAs in addition to traditional courses of study. Currently, 34 colleges have CBE programs, and at least 18 more colleges are developing such programs. 14 CBE programs do not guarantee reduced cost for all students. Because these programs allow students to progress at their own pace, students that progress quickly through many courses or modules might see significant savings. However, if the student does not progress quickly or if the student is paying a flat "subscription" fee per term, the CBE program might actually exceed the cost of a regular program.¹⁵

Both CBE and PLA programs have faced substantial hurdles to implementation. Because state and federal financial aid is rewarded based on credit hours taken, CBE students who enroll in and pass "units" or "competencies" have trouble qualifying for aid. Furthermore, a student who passes a course upon entry rather than upon completion cannot qualify for aid for that credit. There is a process in place for colleges to apply for, and be granted, a waiver to allow students to receive federal aid for CBE programs; however, there has been pushback from the Office of the Inspector General, which criticized programs that award credit for "life experiences," and

some colleges have been denied waivers. ¹⁶ Policy makers also face roadblocks to implementation because of the perceived lack of quality of these programs. While PLA is designed to give students college credit for valuable workplace skills, critics argue that inadequate quality controls exist to ensure that students are being given credit for legitimate skills that equate to a college credential. A recent survey of employers showed resistance to CBE graduates because of the perception that the programs may be cutting corners in order to churn degrees out and gain access to federal aid dollars. ¹⁷

However, despite the hurdles and criticisms, initial studies show that these programs can improve student outcomes. In 2010, the Council for Adult and Experiential Learning released a report on student outcomes finding that students with PLA credit had better academic outcomes, particularly in terms of graduation rates and persistence, than other adult students. Many PLA students also shortened their time to degree, with estimated savings between \$1,605 and \$6,000. State leaders should encourage thoughtful experimentation with CBE programs for their potential in providing affordable educational options for diverse learners.

Increasing College Affordability Through Finance Policies

The following programs directly decrease student costs through revisions to state financial aid models and decreasing or eliminating tuition or other costs.

Shared Responsibility Financial Aid Programs

One financial aid approach that has gained popularity is the Shared Responsibility model, which was pioneered in Minnesota in the early 1980s. A different version of the model has recently been adopted in Oregon. ¹⁹ The idea of Shared Responsibility is that students, families, the state, and institutions all play a role in

financing a student's education. Each party is expected to contribute a certain amount toward the cost of education, whether that is through savings, student work, student loans, state grants, and possibly institutional grants. The amount of student contribution is limited so that students are not expected to work an unreasonable number of hours or take out large student loans.²⁰ The models states have piloted vary in structure, although many states have adopted the "last dollar" model, in which student and family contributions, federal grants, and institutional grants are calculated first and the state provides the remaining funds needed.

Both Oregon's and Minnesota's Shared Responsibility programs have faced funding challenges. In both states, more students wish to participate than grant funding covers. A study of Minnesota grant recipients found that persistence was similar for both grantees and nongrantees; however, the net cost of college for low-income grantees did not increase as much as nongrantees, suggesting that the grants might have a stabilizing effect by cushioning tuition spikes for low-income students.²¹ In Oregon, grant recipients had higher university graduation rates (64.1 percent) than those who did not receive the grant (59.6 percent).22

Other Financial Aid Programs

Another innovation in financial aid delivery is pairing need-based financial aid with student performance, to motivate students to perform in order to remain eligible for grant programs. In 2008 MDRC evaluated a small number of performance-based scholarships awarded to low-income students in California and several other states (Arizona, Florida, New Mexico, New York, and Ohio). The project aimed to test an innovative strategy for addressing two policy objectives: increasing the financial support available to low-income students, and creating an incentive for such students to complete their courses and make more timely progress toward degrees. The idea was to provide a financial supplement to students' existing federal and

state financial aid packages that is contingent on enrolling in a minimum number of credit hours and making passing grades. The performancebased scholarships are paid directly to students (rather than to the colleges or universities they attend) in order to reward students for their progress and to allow them to decide how best to support their schooling. In November 2015, MDRC released a report indicating that all six of the Performance-Based Scholarship Demonstration Projects modestly increased degree completion, and that all the scholarships improved academic progress even after the program ended.²³

Programs That Reduce or Eliminate Tuition

While providing financial aid is one way to directly reduce the cost of college, another approach is to drastically reduce or eliminate tuition. Promise programs, which pay tuition and fees for students, were started as local or community initiatives, often supported by private donors or a combination of local and private resources.²⁴ The programs vary in design, with some requiring students to meet certain academic or income qualifications and others based solely on the locality of residence or college attended. The Promise model was moved from communities to the state level beginning with Tennessee (in 2014) and then Oregon (in 2015). According to the National Conference of State Legislators, since 2014 Tennessee, Oregon, and Minnesota have created free community college programs, and at least 10 additional states introduced legislation to create programs during the 2015 session.²⁵ In the midst of the state action on these programs, in January 2015 President Obama announced his own initiative to make community college free.²⁶

The Tennessee Promise program—a scholarship and mentoring program—was started to ensure eligible students receive enough financial aid to cover tuition and fees at public community colleges. A 2015 report found that Tennessee community colleges saw a 24.7 percent increase

in enrollment of first-time freshmen and the technical colleges experienced 20 percent growth in 2015.²⁷

Oklahoma's Promise scholarship is granted to low-income students who meet certain academic qualifications and refrain from certain delinquent behaviors. The Promise award equals resident tuition at Oklahoma public colleges and universities. Researchers have found that recipients outperform their peers in several important areas. For example, test scores for low-income high school students that were part of the Promise program were higher than test scores for low-income high school students who were not part of the program. Promise students also had lower rates of remediation, higher freshman-to-sophomore persistence rates, and higher degree completion rates (10-year total degree completions for Promise students were 58 percent compared to 48 percent for non-Promise students).28

Programs that Link Tuition and Income

In addition to Shared Responsibility and Free Community College programs, states have been experimenting with a number of other programs that moderate tuition increases or delay tuition payment by linking tuition changes to present or future income levels.

In 2010, Maryland passed legislation linking tuition increases to median family income. The legislation sets a goal that tuition increases not exceed the three-year rolling average increase in median family income. Through this legislation the state created a Tuition Stabilization Fund, which the state pays into in years of increasing corporate revenues. The fund can then be used to offset a decline in state funding, thereby lessening the need for tuition increases when higher education appropriations are lower than the previous year. However, this initiative may not be performing as planned. The 2015 Operating Budget for Maryland shows that tuition increases have exceeded the income figure every year since the enactment of the legislation. The most recent

three-year average actual median family income change in the state was a decline of 1.6 percent, compared to the average tuition increase of 3.0 percent imposed in fall 2014.²⁹

Programs that Reduce Other Higher Education Costs

Another approach to directly reducing costs to students is being explored in Georgia through Affordable Learning Georgia, which seeks to make education more affordable by replacing commercial learning materials (such as textbooks) with no-cost-to-student alternatives. Affordable Learning Georgia focuses on the Top 50 lowerdivision core courses, which are the fundamental building blocks of a college education. Providing no-cost access to learning materials helps to ensure student retention in and completion of these courses, and helps students to stay on track for degree completion. Through adoptions and adaptations of open educational resources, University System of Georgia asserts that it has already saved students an estimated \$1 million in the 2013–2014 academic year.³⁰

Conclusion

States continue to face difficult financial situations that put increasing demands on limited state budgets, making it difficult to ensure that higher education remains accessible and affordable for all students. In this climate of constrained finances, it is important that states continue to experiment with multiple avenues for increasing higher education efficiency and affordability. States should be looking to each other for examples about innovative educational productivity, financial aid, and tuition programs and policies to learn which programs have worked, and to continue advancing educational attainment in a demanding global marketplace.

Endnotes

- 1 The approaches highlighted focus only on state policy efforts; while federal, institutional, and private/industry programs are valuable, they are beyond the scope of this analysis.
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