

EQUITY MEASURES IN STATE OUTCOMES-BASED FUNDING:

Incentives for public colleges to support low-income
and underprepared students

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SUMMARY

State funding for public postsecondary institutions has traditionally been based on enrollment, but today more than two-thirds of states use or will soon use some form of outcomes-based funding (OBF) or a previous model known as performance-based funding (PBF) in four-year, two-year, and/or technical colleges. Although many states have experimented with one of these forms of performance funding, to date, only a few states have tied a significant percentage of state funding to outcomes. Outcomes-based funding (or PBF 2.0) rewards institutions for student outcomes, like student progress or completing degrees. By comparison, performance-based funding may focus on a number of performance measures, but not primarily on student credential attainment outcomes; many early PBF systems also were tied to relatively low levels of state funding. In recent years, a growing number of states have considered implementing more robust outcomes-based funding systems, and we expect this trend to continue.¹

Given states' anticipated increases in the percentage of state funding tied to outcomes, CLASP is concerned, and some research has shown, that institutions may respond to these budgetary incentives by increasing selectivity to make achieving outcomes easier. This would make it more difficult for low-income or underprepared students to access or complete postsecondary education and earn the credentials they need to succeed in today's economy.

When done right, OBF can motivate institutions to target resources to underserved populations. But without proper safeguards, OBF may lead to reduced student access and/or cut the budgets of the open access institutions, like community colleges, that serve these students, exacerbating the already low per student funding levels at such institutions. Likewise, the burden of these reduced investments can translate to increased levels of unmet need for low-income students.²

In this paper, we refer to "equity measures" as performance measures within an OBF system that serve two related purposes: First, they counteract or mitigate OBF's incentives for public postsecondary institutions to increase selectivity, which may leave behind low-income, underprepared, and/or adult students, as well as students of color. Second, equity measures can help ensure that institutions serving students most in need have sufficient resources to help them succeed. Examples of equity measures that could be part of a



state OBF formula include completion of degrees by at-risk students, number of students of color who progress through developmental education and pass one credit bearing course, percentage of students who receive Pell grants, or a bonus for college completion by adult students, which would give extra credit on a completion measure for each adult student.

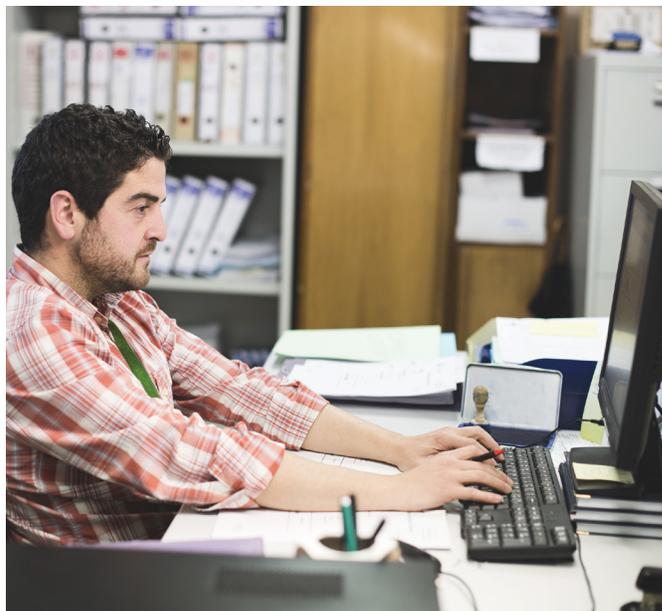
Because few state OBF systems are easy to understand or particularly transparent, this paper provides a classification of equity measures, offering a systematic way to talk about and compare the variety of equity measures in states' OBF systems. CLASP, as an anti-poverty organization committed to postsecondary and economic success for low-income and underprepared students, urges states to include strong, meaningful equity measures in their OBF formulas.

Equity measures can be classified along four dimensions: priority population, type of equity measure, optionality, and weighting (see worksheet in Appendix A). State policymakers, students, college officials, and advocates can compare their state's OBF system to those of other states classified in Appendix B. If a state formula does not already include equity measures, state policymakers should add them. In addition, states should ensure that the weighting of equity measures is sufficient to counteract the power of the funding formula's incentives for institutions to increase selectivity, based in part on the percentage of state funding tied to student outcomes. Finally, states should ensure that at least some equity measures are not optional, but required.

INTRODUCTION

Workers with at least some postsecondary education now make up 65 percent of total employment, and that trend is projected to continue until at least 2020.^{3,4} To meet the economy's workforce needs, our country must increase the number of graduates, which is why many governors, in both blue and red states, are setting ambitious goals for postsecondary credential completion.

At the same time, the country's demographics are shifting dramatically, with the prospective student population increasingly made up of people of color. For historic and systemic reasons, these students are also disproportionately low-income and more likely to have received a substandard secondary education from high-poverty high schools.⁵ Soon, the majority of young Americans under 18 will be people of color, and by 2060 the U.S. is projected to have a non-white majority.⁶ In addition, the number of U.S. high school graduates is headed into a period of stagnation, in part fueled by the effects of this demographic shift. The number of White public high school graduates is expected to decline 14 percent by 2030, while being counterbalanced by the growth in the number of non-White public school graduates.⁷ In terms of postsecondary enrollment, between 2013 and 2024, enrollment for African American and Hispanic students is projected to increase by 28 percent and 25 percent, respectively, while White enrollment is projected to increase by just 7 percent.⁸



This demographic shift will have profound implications, requiring our postsecondary institutions to be more responsive to communities of color, as well as to the non-traditional students who are now the majority of all postsecondary students.⁹ Currently, students of color comprise 42 percent of postsecondary enrollment, while 51 percent of all postsecondary students are low-income.^{10,11} However, although 95 percent of all new jobs created since the Great Recession have been filled by workers with at least some postsecondary education, people of color continue to lag in postsecondary attainment.¹² In 2015, 43 percent of Whites had an associate's degree or higher compared to 32 percent of Blacks and 23 percent of Hispanics.¹³

Unfortunately, states have also severely divested from public postsecondary systems since the Great Recession, which has resulted in staggering increases in tuition.^{14,15} Students, especially those of color, have increasing amounts of unmet need.¹⁶ To meet our workforce needs, and to move toward economic and racial justice, more low-income, underprepared and/or students of color will need to both enter and complete education beyond high school, including bachelor's degrees, associate's degrees, and high-quality certificates and certifications.

OUTCOMES-BASED FUNDING

Traditionally, states have funded public postsecondary institutions based on inputs, most commonly enrollment, or head count. Over the last few decades, states have been experimenting with performance-based funding (PBF) based on student performance, like credit accumulation.¹⁷ When performance funding first emerged in the late 1970s, a small portion of state funding for public colleges and universities was tied to specific indicators of performance (usually as a bonus). In these earlier formulae, the primary driver of colleges' funding allocations remained enrollment costs, while performance was far less important. Starting around 2000, some states began using a newer method to distributing state funds, known as Outcomes-Based Funding (sometimes called Performance Funding 2.0¹⁸). By funding postsecondary institutions in part based on outcomes, rather than only enrollment, OBF differs from earlier performance funding models in several ways.¹⁹ Outcomes-based funding typically distributes a greater portion of state funding than PBF, although the share of institutional funding tied to outcomes in many OBF states is currently still relatively small. Enrollment and other non-performance metrics are less important--although substantial--factors in determining state funding. Notably, OBF is keyed to valued state priorities.

More than two-thirds of states are currently developing and/or implementing PBF or OBF policies of varying constructs, and a number of other states have expressed interest.²⁰ As noted above, many states include relatively little funding in such performance- or outcomes-based systems. There is growing momentum behind efforts to implement more robust OBF systems, such as the highest-level "Tier IV" structure described by Martha Snyder and Brian Fox of HCM, which bases at least 25% of a state's total funding for public postsecondary institutions on student credential attainment outcomes.²¹ As states rethink their funding structures, regardless of where they are in the process, this is an opportune moment to carefully consider how to negate possible negative incentives that could reduce services to low-income, adult, underprepared students and/or students of color.

How Outcomes-Based Funding Works

With each state constructing and implementing its own individualized model, OBF is often varied and complex. However states typically allocate a predetermined amount of postsecondary funding through a formula tied to specific goals and/or metrics. This preset amount of funds subject to OBF varies tremendously by state and type of institution. For example, OBF is responsible for less than 1 percent of higher education base funding in Illinois, while in Ohio, OBF comprises 100 percent of community college funding and 80 percent at four-year institutions.²² Additionally, OBF can come from reallocating existing state appropriations or only apply to new state funds.

Outcomes-based funding formulas incorporate measureable performance metrics to which institutions are held accountable. The number and type of measures vary by state and institution, but they are often tied to explicit state education goals. For example, one of the performance metrics in the Montana University System is the number of undergraduate degrees and certificates earned, which corresponds to the overall state goal of increasing from 40 percent to 60 percent the population with a higher education credential. Each performance metric is given a weight that relates to its value in the overall amount of performance funding. Undergraduate degrees and credentials in Montana are weighted at 30 percent at two-year institutions. Institutions are eligible to receive 30 percent of performance funds



Outcomes based funding in Indiana

Indiana developed its OBF model to help achieve the state's goal that of 60 percent of its residents would hold postsecondary credentials. To meet this goal, the state chose to implement an OBF model that rewards institutions for improvement over a three-year period. In the 2015-2017 biennium, the state allocated 6 percent of total operating dollars for outcomes-based funding. The most recent model features six metrics to adjust base funding for institutions that aim to increase postsecondary credentials. These metrics include overall degree completion, on-time graduation rate, at-risk degree completion, high-impact degree completion, student persistence, and remediation success. Each measure is assigned a weight based on its importance to the state's higher education strategic plan; based on the assigned weight, the Indiana Commission of Higher Education calculated a dollar amount that applies to one additional unit of output. For example, at-risk degree completion is given a weight of 15 percent

of OBF dollars, which translates to \$1,500 for each additional one-year certificate, \$3,000 for each additional associate's degree, and \$6,000 for each additional bachelor's degree. As an example, when comparing three-year averages from 2008-2010 and 2011-2013, Vincennes University produced 7 additional one-year certificates, 60 additional associate's degrees, and 18 additional bachelor's degrees. The units determine the funding the institution is awarded for performance on the at-risk degree completion measure. To fund OBF, a small portion of institutional base funding is reallocated based on performance while new state funds are allocated towards performance. If new money is not available or insufficient to fund the recommended percent of performance funding, the state will reallocate a greater percentage of an institution's existing base funding.

Source: [Indiana Commission for Higher Education Performance Funding](#)

by increasing the number of undergraduate degrees and certificates by one percent compared to the previous three-year average.²³ No states use identical metrics or weights, and some may use an entirely different type of OBF model. For example, Arkansas's utilizes a point system that incorporates ten metrics and rewards points for each metric. For institutions to receive 100 percent of performance funding, they must earn at least six out of ten points to retain funding.²⁴ Other states use OBF metrics such as course completions, successful progress through developmental education, research funding levels, number of STEM graduates, number of graduates who are students of color, and number of Pell graduates.

States also vary in how they award outcomes-based funding. For example, some specify that institutions will not always lose funds if they fail to meet performance funding requirements. Some states will increase or maintain funding based on good performance, or reduce funding to institutions that perform poorly. Some states, such as Florida and Arkansas, offer institutions a chance to address their deficiencies before decreasing their funding allocations.

Outcomes-based funding can reduce access for low-income and underprepared students

In principle, measuring postsecondary institutions' success based on student outcomes rather than enrollments could help to promote improvements in the supports low-income students need to stay in and complete postsecondary programs. However, without strong safeguards, OBF can instead create incentives to reduce access for low-income and underprepared students and unduly punish the open-access institutions that serve them.²⁵ For example, it is easy to imagine that in an effort to meet performance goals, a postsecondary institution may increase its entrance requirements to erect barriers to enrollment by prospective students they perceive as less likely to meet the goals. In Wyoming, two-year institutions are awarded a predetermined amount of funding based only on course completions.²⁶ In this model, there is little incentive for colleges to accept underprepared students who may have a harder time successfully completing courses.

Research by the Community College Research Center (CCRC) shows that admissions restrictions for underprepared students is the most commonly cited

unintended consequence of performance-based state funding.²⁷ The CCRC report includes findings from a three-year study of three leading OBF states – Indiana, Ohio, and Tennessee – and is based on extensive interviews with state officials and staff at 18 public institutions. Those interviewed detailed strategies by postsecondary institutions have used or may use to increase selectivity to avoid enrolling low-income and underprepared students, a group that disproportionately includes students of color and adult students. Strategies reported or predicted included:

- Raising admissions requirements (30 of 67 respondents);
- General restrictions (22 of 67 respondents);
- Selective student recruitment (15 of 67 respondents); and
- A shift toward non-need-based financial aid (6 of 67 respondents).

In addition to this qualitative research, two quantitative papers point to possible increased selectivity. A 2016 paper in the *Journal of Education Finance* found some evidence that four- and two-year colleges in states with performance-based funding (PBF) policies changed their recruitment strategies to improve outcomes, likely meaning they will enroll fewer low-income students. Colleges facing PBF received slightly less Pell Grant revenue than colleges in non-PBF states, which may represent a slight shift toward enrolling students from higher-income families.²⁸ Similarly, a 2015 paper in *Educational Policy* found that performance funding did not increase the number of graduates and instead led to declining admission rates and increased selectivity at Indiana’s public universities.²⁹

Whether intended by institutions or not, this evidence shows that state policymakers need to take strong action to counteract the negative incentives of OBF.

Significantly, states have identified the need to prioritize underrepresented students and are, to some extent, addressing it. Most notably, HCM Strategies has developed an influential typology of four types of OBF for the field.³⁰ The types, I to IV, are designated according to the states’ level of sophistication and adherence to promising practices. These promising practices are in seven “critical areas.” One of the seven “critical areas” is “prioritization of underrepresented students.” CLASP

Equity measures are OBF measures that counteract or mitigate OBF’s incentives to increase postsecondary selectivity, which may leave behind low-income, underprepared, and/or adult students, as well as students of color. They also give open access or other non-selective institutions the resources they need to best serve these students, who may require more costly support to move toward completion.

sees this as absolutely key to any state OBF system, and fortunately many states do have some way of prioritizing underrepresented students. However, the typology gives a state credit for prioritizing underrepresented students if it has even a single “priority measure” for any group of underrepresented students, whether required or optional, and without regard to the measure’s weight in the OBF formula. In other words, meeting the prioritizing criteria is a yes/no question. We need a stronger, but more nuanced approach.

Equity Measures

State policies must strongly counteract the negative incentives of OBF to restrict access for low-income and underprepared students, who disproportionately include students of color, adults, and first-generation students. They must also provide support to serve such students who can achieve success through evidence-based programs that have increased per-student costs. We know from rigorous research that moving underprepared students through community college to completion can be improved, but most likely only with considerably more funding.

For example, the City University of New York (CUNY) Accelerated Study in Associate Programs (ASAP) initiative, which has an additional price tag of \$4,500 to \$6,000 per student, is designed to support associate degree-seeking students through a mixture of comprehensive advisement, financial assistance and structured pathways.³¹ ASAP has been found in studies using both quasi-experimental and experimental designs to be extremely successful at increasing three-year associate degree attainment rates, and has achieved a three-year graduation rate of over 50 percent, more than double the rate of comparison group students.³² The program is now being successfully replicated in three Ohio community colleges.³³

States should use what we term “equity measures” in their funding formulas. *An equity measure is an OBF measure that counteracts or mitigates OBF’s incentives to increase postsecondary selectivity, which leaves behind low-income, underprepared, and/or adult students, as well as students of color. They also give open access or other non-selective institutions the resources they need to best serve these students, who may require more costly support to move toward completion.* Equity measures can be classified in ways that may indicate how strong or weak they will be at counteracting increased selectivity. This paper describes such a classification.

The concept should be an advocacy tool for stronger policies that both counteract the forces that favor increased selectivity and reward schools for serving those with the greatest need. We build on the HCM concept of “priority measures,” as described above, but unlike priority measures, equity measures are not a binary proposition.³⁴ We describe four dimensions on which they can be classified. They also explicitly include progress measures for underprepared students, because underprepared students cannot be separated from low-income, first-generation, adult students, or students of color.

Dimensions on which Equity Measures can be classified

Equity measures can be classified along four dimensions. The first is the population to be prioritized. The second is the type of equity measure; we identify six types of equity measures. The third dimension is optionality: whether the measure is required, optional, or determined by the institution. The fourth dimension addresses weighting of the measures, in comparison to the percentage of state funding distributed based on outcomes.

Population

Classifying equity measures can identify incentives to serve an important population group: low-income and underprepared students, who are disproportionately adults and students of color. In their current measures, states define these populations differently, with some using umbrella terms like “Underserved populations” (USP) such as in Colorado, Nevada, Montana, Utah, and Virginia, where the umbrella term may include different specific populations. Other states may not have an umbrella term and simply identify the individual populations of need, e.g., Pell recipients, Adult, African American, Hispanic, and others. (See Box 1)

Box 1. Relevant Populations currently in use:

Umbrella population terms

- Under Represented Minorities (URM) (Massachusetts, Pennsylvania);
- Underserved populations (USP) (Colorado, Nevada, Montana, Utah, Virginia);
- At-risk students (Illinois, Indiana, Massachusetts, Mississippi);
- Underrepresented/at-risk (Montana); and
- Focus populations (Tennessee)

Specific populations

- Pell recipients;
- Low-income (measure other than Pell);
- First generation
- Adult ((25+(Illinois), (30+ (Maine)));
- African American;
- Hispanic;
- American Indian (Montana);
- Developmental student;
- Adult education student; and
- Underprepared as measured by a test.

Types of Equity Measures

Equity measure “type” is the second of the four dimensions by which equity measures can be classified. After reviewing equity measures in many states, we describe the 6 types of measures in a 3 by 2 matrix (See Table 1). The top row of the matrix includes two options: Direct or Bonus. The left column includes 1) Outcome, 2) Input, or 3) Progress.

Some states use direct measures, like awarding a percentage of funding based on the total number of Pell graduates. Others use bonus weighting on measures, like increasing the value of Pell-receiving graduates to the overall graduation measure. Direct equity measures and bonus equity measures can be further broken down by outcome, input, and progress measures.

Total number of degrees awarded is an example of a direct outcome measure. We only count as “equity measures” those direct outcome measures that are tied to an underserved population, either by explicitly measuring the outcomes of underserved populations or by awarding a bonus for the outcomes of underserved populations. Indiana, for example, awards institutions up to 15 percent of OBF funding based on degree completions from low-income students. We consider this an equity measure that is tied to a direct outcome.³⁵

What we classify as input measures are not traditionally viewed as OBF measures. However, input measures can have equity concepts within that guard against unintended consequences of OBF. For example, a portion of funding at two-year institutions in Hawaii is awarded to institutions for enrolling a target number of Pell-receiving students.³⁶ Some institutions may also incorporate other bonuses on enrollments.

Table 1. Six types of Equity Measures

	Direct	Bonus
Outcome	<p>Direct outcome measure.</p> <p>Stand-alone metric that measures an outcome, like certificate or degree completions by low-income students.</p>	<p>Bonus outcome measure.</p> <p>Premium on Direct Outcome measure for a certain population, like a premium on the graduation measure for adult student graduates.</p>
Input	<p>Direct input measure.</p> <p>Stand-alone metric that measures an input, like total number of Pell student enrollees.</p>	<p>Bonus input measure (rare).</p> <p>Premium on Direct Input measure for a certain population, like a premium on the enrollment measure for enrollees who are students of color.</p>
Progress	<p>Direct progress measure.</p> <p>Stand-alone metric that measures progress, like progress through developmental education by underprepared students.</p>	<p>Bonus progress measure.</p> <p>Premium on a Direct Progress measure for a certain population, like a premium on the course completion measure for low-income student course completers.</p>

Additionally, what we classify as progress measures, such as completed credit hours, have been a component of higher education funding in many states prior to this new wave of outcomes-based funding. Some states, however, incorporate incentives to institutions for offering underserved students the support they need to ensure success. For example, Colorado gives bonus funding for completed credit hours by low-income students and minorities.³⁷ A direct progress measure could be incentivizing institutions to support students in their progress out of developmental education.

Bonus measures give premiums for a targeted population within a direct measure and are typically added on to an institution's outcome in the context of a direct measure. For example, 30 percent of performance funds are awarded to Nevada universities that increase the number of bachelor's degrees awarded from prior years. However, to encourage universities to graduate diverse populations, degrees obtained by minority students and non-minority Pell-eligible students are given a 40 percent premium, which makes these degrees worth 1.4 when calculating the total number of degrees awarded.³⁸ Our construct encompasses bonus outcome measures, bonus input measures, and bonus progress measures. Nevada's bonus for degrees earned by minority and Pell-eligible students is an example of a bonus outcome measure. Massachusetts's two-year multiplier for Pell-recipient students is a bonus input measure, and Ohio's bonus on course completion for academically underprepared students is a bonus progress measure.³⁹

Some states include both direct and bonus equity measures. Montana's OBF formula for two-year institutions has a direct progress measure for students progressing from remedial courses to college level courses and also offer a bonus weight for American Indian students, adult students, and low-income students as part of its formula for direct measures of completion (degrees and certificates awarded) and retention (first-time freshmen and new transfer students returning for their second year).⁴⁰ Colorado's model features bonus progress measures for completed credit hours by Pell-eligible and underrepresented minorities, as well as a bonus outcome measure for degrees and certificates awarded to Pell-eligible students and underserved minorities.⁴¹ In this model, institutions are given additional funding for both enrolling and graduating low-income and minority students. Having multiple types of equity measures may further mitigate unintended consequences of increased selectivity and also give institutions the needed resources to serve diverse student populations.

Table 2. Examples of types of Equity Measures.

Six Types of Equity Measures	Example	State and sector
Direct outcome	At-risk degree completion.	Indiana (2- and 4-year) ⁴²
Direct input	Number of Pell recipients enrolled.	Hawaii (2-year) ⁴³
Direct progress	Students who have less than 19 ACT score who successfully complete first college English or math that is not a remedial course.	Mississippi (4-year)
Bonus outcome	80% "premium" for undergraduate degrees and certificates earned by adult OR low-income student (one focus population). 100% premium if student is both adult and low-income (two focus populations).	Tennessee (2- and 4-year) ⁴⁴
Bonus input	2.0 Multiplier for Pell-recipient students.	Massachusetts (2-year) ⁴⁵
Bonus progress (rare)	Course completion (bonus weight for academically underprepared students).	Ohio (2 and 4-year) ⁴⁶

Quantitative research is not available on which types of measures may be more powerful in supporting equity. Research on this topic and equity measures more broadly is certainly needed.

Recent work from Research for Action on Tennessee and Indiana has found that OBF in general provided positive impacts for full time students, including for Pell students and to a lesser extent, under-represented minorities.⁴⁷ However, part-time students did not fare well.⁴⁸ This raises a new type of equity concern: creating gaps because some groups are benefiting from OBF more than others. While very important, this is outside the scope of this particular paper.⁴⁹

Optionality: Required, optional, choice of limited number of measures, or choose your own.

Another dimension for classifying equity measures is the extent to which they are required, optional, chosen from among a list, or selected by the institution. Most measures are mandatory, for example, At-Risk Degree Completion in Indiana.⁵⁰ However, in Arkansas, institutions use three optional equity measures: Minority Credentials, Non-Traditional Credentials, and Remedial Credentials.⁵¹ Wisconsin Technical Colleges must choose seven from among nine different measures. Kansas, on the other hand, allows community colleges to develop their own metric that addresses non-college-ready students. For example, one Kansas community college has chosen an indicator measuring the increase in first-year to second-year retention rates of the non-college ready student population.⁵² In the absence of research on which approach is best for low-income and underprepared students, we posit that a required equity

measure would be more effective than an optional measure. However, choosing measures from a list may allow a postsecondary institution to focus on its largest groups of students. Allowing institutions to choose their own unique measures seems problematic, as data should be comparable across schools to the extent possible, and selecting one's own measure opens up too much opportunity to game the system.

Weighting

One of the most important dimensions for classifying equity measures is by the weight assigned to components of the measure and system. Three are important: the weight on a direct measure, the weight or "premium" on a bonus measure, and the overall percentage of state funding distributed through OBF. Processes for determining the ultimate funding for each college can be very complex, so simple weighting may not be enough to know if an equity measure is strong, but it is an important place to start. For example, in Hawaii's formula, Pell Recipients are weighted at 10 percent of overall OBF funding.⁵³ In Florida, colleges get a 25 percent bonus for completers who received a Pell grant.⁵⁴ All things being equal, higher weights should lead to increased incentives to improve outcomes for low-income and underprepared students. However, if the amount of state postsecondary funding distributed by OBF is very small (for example 0.5 percent in Illinois), then higher weights may not lead to increased incentives and it is not as critical that the equity measure weights are high. On the other hand, in a state like Ohio, where 100 percent of state community college funding is distributed by OBF, it is critical that direct and bonus measure weights are robust from the beginning.⁵⁵

Table 3. Equity Measure Weighting

	Measure	Weight
Direct	Pell Recipient	10 percent (Hawaii)
Bonus	Completers that received a Pell grant	1.25 multiplier (Florida)

Table 4. Funding dedicated to Outcomes Based Funding

State	Funding for OBF
Indiana	6% of total institution operating dollars for the 2015-2017 biennium. ⁵⁶
Kansas	All new state funds for postsecondary institutions are awarded through outcomes. ⁵⁷
Ohio (Community Colleges)	100% of community college funding is determined by outcomes. ⁵⁸
Nevada	5% of base funding in FY15 with annual 5% increases until it reaches 20% in FY18. ⁵⁹

An illustrative example of direct measures weighting can be found in Utah.⁶⁰ As of 2015, Utah's direct measure of Services Provided to Traditionally Underserved Students was weighted at 10 percent for the state's research universities and 15 percent for regional universities and community colleges. We would argue that the weighting should be higher at community colleges than regional

universities because of their open access missions. However, to our knowledge there is no quantitative research providing guidance on how much weighting is enough to mitigate the unintended consequences of OBF. This, again, highlights the need for more quantitative research.

Table 5. Utah – Direct measure weighting

	Degrees and Certificates Granted	Services Provided to traditionally underserved students	Responsiveness to Workforce Needs	Graduate Research for Research Universities	Graduation Efficiency
Research Universities	25%	10%	10%	15%	40%
Regional Universities	25%	15%	10%	0%	50%
Community Colleges	25%	15%	10%	0%	50%

Tennessee and Ohio: bonus equity measure weighting

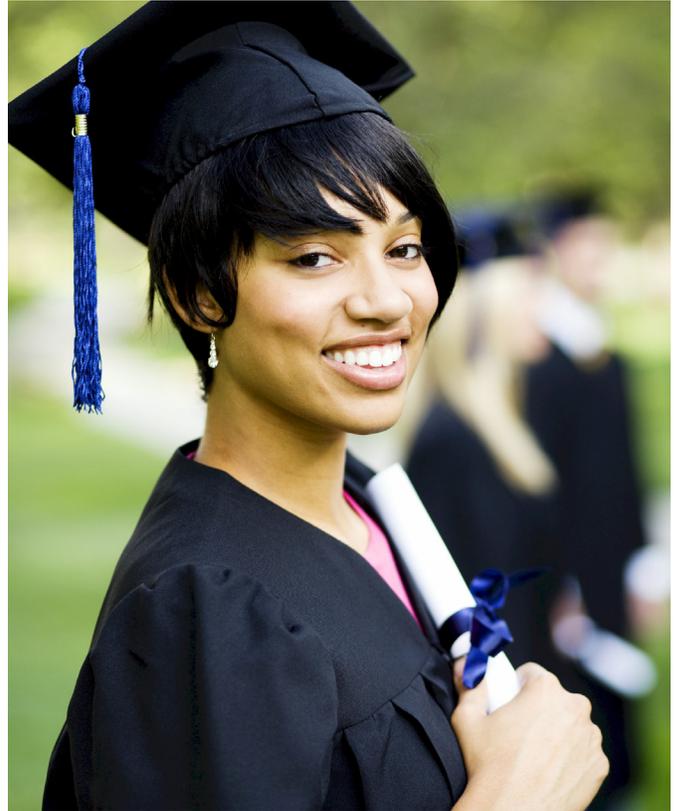
Tennessee and Ohio provide extremely helpful and unique examples for states that want to weight their OBF bonuses in a way that will benefit low-income students, adults, and underprepared students. Both states offer compounded bonus weights for students who meet multiple "at-risk" or "focus population" categories, acknowledging the diverse nature of nontraditional students and recognizing the additional supports needed

to successfully persist in and complete postsecondary education.

Tennessee, which has been recognized as a leader in using equity measures, applied a 40 percent premium (or bonus) for Pell students or adults 25 years or older when calculating its progression and completion direct measures from 2010 to 2015. However, based on feedback from campus leaders, Tennessee officials found that the 40 percent bonus was not sufficient. Institutional leaders familiar with the formula reported in

a qualitative survey that they “lament that the premiums are well-meaning, but do not offset the challenges faced by low-income and first-generation students.”⁶¹ In the 2015-2020 funding cycle, Tennessee decided to refer to the subgroups as “focus populations” and added a third category for academically underprepared students at community colleges. Rather than a straight 40 percent bonus on completion for the two subpopulations, institutions now receive tiered bonuses: an 80 percent premium for students who qualify for one focus population; a 100 percent premium for students who qualify for two focus populations; and, in community colleges only, a 120 percent premium for students who are members of all three focus populations: low-income adults who are underprepared for credit-bearing work. Each bonus is available on a progress measure (credit accumulation) and an outcome measure (completion).⁶² Other states should also respond to institutional feedback and strengthen inadequate equity measures.

Ohio also encourages universities to accept at-risk students by offering additional funding through a graduated bonus weighting system. As in Tennessee, Ohio has increased bonus weights for students meeting various combinations of being at-risk. What distinguishes Ohio, however, is that the bonus weights are informed using data on how at-risk student degree attainment rates compared to students who were not at-risk. In developing the performance funding model for its universities, the state categorized at-risk students by: age (Students over 22 years old when they began college), financial (Students with an earned family contribution of less than \$2,190 in any of the years prior to degree attainment), academic (students that scored less than a 17 on the ACT Exam in either Math or English), and race (students reported as African American, American Indian, or Hispanic). To calculate the weight applied to degree recipients at universities, students were placed into one of 16 cases based on a combination of the risk factors, ranging from students with no risk factors to students with all four risk factors. The state then compared associate and bachelor attainment rates over eight years among students who had no risk factors with students meeting any combination of risk factors. For example, to determine FY17 weights, the state tracked the eight-year progress of full-time degree seeking students who started in the summer or fall of 2002, 2003, 2004, and 2005 over the next 8 years. Across Ohio universities, students with no at-risk factors had a 72 percent graduation rate during this period. In comparison, students who were



financially at risk had a graduation rate of 68 percent, while students who met all risk factors had a graduation rate of only 26 percent. Using a calculation to compare the different weights, this amounted to a 6.1 percent weight for financially at-risk graduates and a 177 percent weight for graduates who met all at-risk categories. The calculation is redone every year, ensuring the weights are responsive and reflect student needs. In addition, a similar calculation is done to weight at-risk course completions; however, the only categories are academic and financial. The formula differs at Ohio community colleges, which have a standard 15 percent weight for at-risk course completions with no increase for meeting additional categories. However, degrees are weighted at 25 percent for students meeting one at-risk factor, 66 percent for meeting two, 150 percent for meeting three, and 200 percent for meeting all four.⁶³ Ohio offers a good approach for other states to consider when using institutional data to determine weighting systems.

Other characteristics of OBF systems that promote equity

In addition to individual measures, many states' systems have other ways of rewarding institutions' missions, such as the open access mission of community colleges. Most importantly, most states have established different sets

of measures and/or weights for four-year institutions and two-year institutions. This is helpful because two-year institutions can be rewarded more for serving a less-prepared student population, without fear of losing funding that would create an incentive to restrict access to higher-level students. Similarly, in many states, if there is competition between schools for a limited pool of funding, four-year schools compete only with other four-year institutions, while two-year schools or technical colleges compete only with their own peers. In a number of states, institutions compete only against themselves, meaning they get credit for improvement year over year, but do not directly compete with other institutions, which promotes continuous improvement rather than competition.



CONCLUSION

While further research is needed to determine optimal types and weighting of equity measures to ensure access for low-income and underprepared students, state OBF systems have experimented with a variety of approaches that can be considered equity measures. As we have discussed in this paper, state OBF systems can classify equity measures along four dimensions: priority population, type of equity measure, optionality, and weighting (using provided worksheet: see *Appendix A*). By better understanding the purposes and effects of these approaches, state policymakers can design equity measures that have a meaningful impact on outcomes-based funding, and thus promote efforts by public postsecondary institutions to help their most vulnerable students succeed.

In summary, we recommend that:

- States should identify whether they have any equity measures. If so, a state should classify the equity measures to have a complete understanding of how the incentives may impact low-income students (see *Appendix A*).
- States should closely examine the best practices emerging from other states and develop or refine their policies accordingly (see *Appendix B*).
- Newly developed state OBF systems should include strong equity measures from the start.
- States should add equity measures to OBF formulas if they don't have them already.
- If an OBF system already includes equity measures, states should ensure that the weighting of direct and bonus measures is sufficient to counteract the strength of the incentives to increase selectivity, based in part on how much state funding is distributed by outcomes. The weighting of the equity measures should be commensurate with the magnitude of the funding that could lead to institutional incentives to restrict access for low-income and underprepared students.
- State OBF systems should make at least some equity measures (whether direct or bonus) mandatory, rather than optional.



State funding formulas must compensate schools that do the hard work of supporting students to better outcomes, in recognition of the additional costs associated with helping low-income students complete their postsecondary education programs. As low-income, non-traditional students are an increasing share of postsecondary students, states must ensure institutions have funding for evidence-based best practices that support their success. By building robust equity measures into their OBF formulas for postsecondary institutions, states can target their resources at policies that educate a prepared workforce and increase economic and racial equity and mobility.

APPENDIX A

Equity Measure Classification: How do your state's OBF equity measures measure up?

Equity Measure: OBF measures that counteract or mitigate OBF's incentives to increase postsecondary selectivity, which may leave behind low-income, underprepared, and/or adult students, as well as students of color. They also give open access or other non-selective institutions the resources they need to best serve these students, who may require more costly support to move toward completion. CLASP developed a classification worksheet to help states identify and analyze their OBF equity measures using the principles from this paper.

State: _____

Percent of state funding by OBF: _____

Four-Year

Equity Measure	Umbrella Population (if applicable)	Population(s)	Type	Required, Optional, choose from list?	Weighting (bonus)	Weighting (measure)

Two-Year

Equity Measure	Umbrella Population (if applicable)	Population(s)	Type	Optionality: Required, Optional, Choose from list, create own?	Weighting (bonus)	Weighting (measure)

APPENDIX B

Equity Measure Classification: How do your state's OBF equity measures measure up?

Equity Measure: OBF measures that counteract or mitigate OBF's incentives to increase postsecondary selectivity, which may leave behind low-income, underprepared, and/or adult students as well as students of color. They also give open access or other non-selective institutions the resources they need to best serve these students, who may require more costly support to move toward completion.

CLASP developed a classification worksheet to help states identify and analyze their OBF equity measures using the principles from this paper. We offer examples of equity measures in Indiana, Ohio, and Tennessee, which are three widely studied models.

State: Indiana

Percent of state funding by OBF: 4% of operating appropriations in FY16 (\$47 million) and 6.5% (\$78 million) in FY17.

Four-Year

Equity Measure	Umbrella Population (if applicable)	Population(s)	Type	Required, Optional, choose from list, create own?	Weighting (bonus)	Weighting (measure)
At-risk Student Degree completion	At-risk students	Low-income students	Direct outcome	Required	N/A	15%
Remediation Success Incentive		Students in developmental education	Direct progress	Required	N/A	Not funded in 2015

Two-Year

Equity Measure	Umbrella Population (if applicable)	Population(s)	Type	Optionality: Required, Optional, Choose from list, create own?	Weighting (bonus)	Weighting (measure)
At-risk Student Degree completion	At-risk students	Low-income students	Direct outcome	Required	N/A	15%
Remediation Success Incentive		Students in developmental education	Direct progress	Required	N/A	Not funded in 2015

Equity Measure Classification: How do your state's OBF equity measures measure up?

Equity Measure: OBF measures that counteract or mitigate OBF's incentives to increase postsecondary selectivity, which may leave behind low-income, underprepared, and/or adult students as well as students of color. They also give open access or other non-selective institutions the resources they need to best serve these students, who may require more costly support to move toward completion.

CLASP developed a classification worksheet to help states identify and analyze their OBF equity measures using the principles from this paper. We offer examples of equity measures in Indiana, Ohio, and Tennessee, which are three widely studied models.

State: Ohio

Resources: https://www.ohiohighered.org/content/fy2017_operating_budget

Percent of state funding by OBF: 80% at four-year institutions and 100% at two-year institutions

Four-Year

Equity Measure	Umbrella Population (if applicable)	Population(s)	Type	Optionality: Required, Optional, Choose from list, create own?	Weighting (bonus)	Weighting (measure)
Degree completion: Bonus for adult, low-income, underprepared, and minority completions	At risk	Adult students Pell-eligible students Students of color Academically at-risk students	Bonus outcome	Required	There is a graduated weighting system that applies to students that meet multiple risk factors and varies by institution. See Ohio Performance Based Funding Evaluation Report for exact weights	50%
Course completion: Bonus for financial and academically at-risk.	At-risk	Adult students Pell-eligible students Students of color Academically at-risk students	Bonus progress	Required	There is a graduated weighting system that applies to students that meet multiple risk factors and varies by institution. See Ohio Performance Based Funding Evaluation Report for exact weights.	30%

Two-year

Equity Measure	Umbrella Population (if applicable)	Population(s)	Type	Optionality: Required, Optional, Choose from list, create own?	Weighting (bonus)	Weighting (measure)
Course completions: Bonus for adult students, low-income students, minority students, and underprepared students.	Access students	Adult students Pell-eligible students Students of color Academically at-risk students	Bonus progress	Required	15% - no distinction based on the number of access factors	50%
Number of students who successfully completed a developmental Math or developmental English course in the prior year and who subsequently enroll in a college level Math or English course (at any Ohio public college or university) either later that year or in the current year.		Underprepared students	Direct progress	Required		25% of OBF funding is divided between developmental course completion and credit accumulation.
Degree completion: Bonus for adult, low-income, underprepared, and minority completions	Access students	Adult students Pell-eligible students Students of color Underprepared students	Bonus outcome	Required	The number of completers with one access factor * 25% + the number of completers with 2 access categories * 66% + the number of completers with 3 access factors * 150% + the number of completers with 4 access factors * 200%.	25%

Equity Measure Classification: How do your state's OBF equity measures measure up?

Equity Measure: OBF measures that counteract or mitigate OBF's incentives to increase postsecondary selectivity, which may leave behind low-income, under-prepared, and/or adult students as well as students of color. They also give open access or other non-selective institutions the resources they need to best serve these students, who may require more costly support to move toward completion.

CLASP developed a classification worksheet to help states identify and analyze their OBF equity measures using the principles from this paper. We offer examples of equity measures in Indiana, Ohio, and Tennessee, which are three widely studied models.

State: Tennessee

Percent of state funding by OBF: After base funding is set, 100% of remaining funding is allocated via OBF

Resources: <http://www.tn.gov/thec/article/2015-20-funding-formula>

Four-Year

Equity Measure	Umbrella Population (if applicable)	Population(s)	Type	Optionality: Required, Optional, Choose from list, create own?	Weighting (bonus)	Weighting (measure)
Students Accumulating 30 hrs: Bonus for adults and low-income students	Focus Population	Students 25 years or older Pell-eligible students	Bonus Progress	Required	80% for students who qualify for one bonus measure and 100% for students who qualify for both	2%-6% (Varies by institution)
Students Accumulating 60 hrs: Bonus for adults and low-income students	Focus Population	Students 25 years or older Pell-eligible students	Bonus Progress	Required	80% for students who qualify for one bonus measure and 100% for students who qualify for both	4%-7.5% (Varies by institution)
Students Accumulating 90 hrs: Bonus for adults and low-income students	Focus Population	Students 25 years or older Pell-eligible students	Bonus Progress	Required	80% for students who qualify for one bonus measure and 100% for students who qualify for both	6.5%-10% (Varies by institution)
Bachelor's and Associates Degrees: Bonus for adults and low-income students	Focus Population	Students 25 years or older Pell-eligible students	Bonus Outcome	Required	80% for students who qualify for one bonus measure and 100% for students who qualify for both	20%-30%

Two-Year

Equity Measure	Umbrella Population (if applicable)	Population(s)	Type	Optionality: Required, Optional, Choose from list, create own?	Weighting (bonus)	Weighting (measure)
Students Accumulating 12 hrs: Bonus for adults, low-income, and academically underprepared	Focus Population	Adults Low income Academically underprepared	Bonus Progress	Required	80% for students who qualify for one bonus measure, 100% for students who qualify for two, and 120% for students who qualify for all three.	3%
Students Accumulating 24 hrs: Bonus for adults, low-income and academically underprepared	Focus Population	Adults Low income Academically underprepared	Bonus Progress	Required	80% for students who qualify for one bonus measure, 100% for students who qualify for two, and 120% for students who qualify for all three.	5%
Students Accumulating 36 hrs: Bonus for adults, low-income and academically underprepared	Focus Population	Adults Low income Academically underprepared	Bonus Progress	Required	80% for students who qualify for one bonus measure, 100% for students who qualify for two, and 120% for students who qualify for all three.	7%
Associates Degrees: Bonus for adults, low-income and academically underprepared	Focus Population	Adults Low income Academically underprepared	Bonus Outcome	Required	80% for students who qualify for one bonus measure, 100% for students who qualify for two, and 120% for students who qualify for all three.	5%
1 to 2 Year Certificates: Bonus for adults, low-income and academically underprepared	Focus Population	Adults Low income Academically underprepared	Bonus Outcome	Required	80% for students who qualify for one bonus measure, 100% for students who qualify for two, and 120% for students who qualify for all three.	5%
Less than 1 Year Certificates: Bonus for adults, low-income and academically underprepared	Focus Population	Adults Low income Academically underprepared	Bonus Outcome	Required	80% for students who qualify for one bonus measure, 100% for students who qualify for two, and 120% for students who qualify for all three.	5%

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