

## PRODUCTIVITY FUNDING MODEL POLICY UNIVERSITIES

---

### **Background**

Act 148 of 2017 repealed the needs-based and outcome-centered funding formulas as prescribed in Arkansas Code § 6-61-210, Arkansas Code § 6-61-224, Arkansas Code § 6-61-228, Arkansas Code § 6-61-229, Arkansas Code § 6-61-230, and Arkansas Code § 6-61-233, and amended Arkansas Code § 6-61-234. The Act directs the Arkansas Higher Education Coordinating Board to adopt policies developed by the Department of Higher Education necessary to implement a productivity-based funding model for state-supported institutions of higher education.

Productivity-based funding is a mechanism to align institutional funding with statewide priorities for higher education by incentivizing progress toward statewide goals. At the same time, such models encourage accountability to students and policymakers by focusing on the success of students through the achievement of their educational goals. The new funding model is built around a set of shared principles developed by institutions and aligned with goals and objectives for post-secondary attainment in our state.

A set of guiding principles, which is described below, is important to orient the design of a new funding model for public higher education institutions. These guiding principles allow the development of a productivity-based funding model which is student-centered and responsive to post-secondary attainment goals, while creating a funding context which enables innovation, increased efficiency and enhanced affordability.

### **Guiding Principles**

#### **Student-centered:**

- The model should place at its center students and students' needs including both access to and completion of meaningful and quality post-secondary learning.

#### **Outcomes:**

- The model should focus on completion, and particularly on completions of under-served and at-risk students and completions in areas of need by the state and industry. This structure should recognize differences in investment associated with meeting the evolving needs of students, the workforce, and the state.

#### **Collaboration:**

- The model should provide incentives for cross-institutional collaboration and reward the successful transition of students across institutions.

#### **Supporting institutional mission:**

- The model should respect and be responsive to the diverse set of missions represented by each public institution of higher education.

**Formula structure:**

- The model should maintain clarity and simplicity.

**Flexibility:**

- The model should be adaptable in the face of a dynamic institutional and external environment.

**Stability and transition:**

- The model should support short-, mid- and long-term financial stability of the public institutions of higher education, while focusing attention on outcomes and the goals of the state. The transition from the current funding formula to a productivity-based funding formula should allow for a managed and intentional transition process which mitigates negative impact at any one or group of institutions.

**Measures**

In addition to incorporating the guiding principles above, measures adopted in the productivity-based funding model should acknowledge the following priorities:

- Differences in institutional missions are recognized and encouraged.
- Completion of students' educational goals should be the most important priority of every institution.
- Progression toward completion recognizes that funding must follow the student.
- Affordability is encouraged through on-time completion, limiting excess credits, and efficient resource allocation.
- Collaboration is rewarded by encouraging successful transfer of students and reducing barriers to student success.
- Potential unintended consequence of raising academic requirements or lowering academic quality to increase completions must be discouraged.

The measures adopted relate to Effectiveness, Affordability and Efficiency. In addition, some adjustments to the model are necessary to respond to the unique missions of some institutions which cannot be captured in the productivity metrics.

Measures will be reviewed every five years to ensure that the model continues to respond to the needs and priorities of the state. A review more frequently than five years is impractical as institutions would not have opportunity to respond in a timely fashion. However, if it is determined that the measures adopted have created unintended consequences, those measures will be reviewed immediately.

## Productivity Measures

### Summary of Measures

The productivity funding formula consists of four categories: Effectiveness (80% of formula), Affordability (20% of formula), Adjustments, and Efficiency (+/-2% of formula). The metrics of the four categories are broken down below.

<b>Effectiveness</b>	<b>Affordability</b>	<b>Adjustment</b>	<b>Efficiency</b>
<ul style="list-style-type: none"><li>• Credentials</li><li>• Progression</li><li>• Transfer Success</li><li>• Gateway Course Success</li><li>• Non-Credit Workforce Training</li><li>• Post-Completion Success</li></ul>	<ul style="list-style-type: none"><li>• Time to Degree</li><li>• Credits at Completion</li></ul>	<ul style="list-style-type: none"><li>• Research (4-year only)</li><li>• Diseconomies of Scale (2-year only)</li></ul>	<ul style="list-style-type: none"><li>• Core Expense Ratio</li><li>• Faculty to Administrator Salary Ratio</li></ul>

At this time, Non-credit Workforce Training and Post-Completion Success are not included in the formula but will be metrics under the effectiveness category when adequate data is available. Other future technical modifications, such as an addition of an inflationary index and refining of existing metrics, will be considered in the future as necessary.

Each metric is calculated using a three-year average based on the most recent academic year data that is available. Institutions will receive points in the productivity model according to the requirements of each metric. Points for each institution will be totaled and applied according to the weighting assigned to each metric in the effectiveness and affordability categories. Once the points for the effectiveness and affordability measures are totaled, adjustments based on research activities for universities and diseconomies of scale for two-year colleges will be applied. Finally, the efficiency category will be applied against the adjusted total. The final total of points will become the institution's Productivity Index.

### Effectiveness Category

#### **Credentials**

The primary measure of effectiveness emphasizes students completing credentials that meet their educational goals and meet workforce needs of the state. The importance of credentials at each educational level are recognized. In addition, the unique characteristics of students are measured to recognize the

additional resource needs of institutions which serve students' needs. Characteristics include underserved race and ethnicity, underserved income, age, and underserved academic.

The Credentials metric is weighted at forty percent (40%) of the effectiveness category. This metric includes the average of the number of credentials awarded over the most recent three academic years, with consideration given to credentials earned by students who contribute to closing the attainment gap of underserved populations in Arkansas, as well as credentials that will help meet state workforce needs.

The Credentials metric includes the number of credentials earned in all degree levels: Certificate of Proficiency, Technical Certificate, Associate Degree, Advanced Certificate, Bachelor's Degree, Post-Baccalaureate Certificate, Master's Degree, Post-Master's Certificate, Specialist, and Doctoral Degree. Designated weights are applied to each level of credential. All credentials earned in Science, Technology, Engineering and Math (STEM) and High Demand fields receive additional weights. Credentials earned by students who are underserved in the areas of race/ethnicity, income, academic preparedness and age will receive additional weight. Degrees and certificates above the Bachelor's level will only receive additional weight for underserved race/ethnicity.

Weighting Specifications – Degree Level

Certificate of Proficiency	0.5
Technical Certificate	1.0
Advanced Certificate, Post-Baccalaureate Certificate, Post-Master's Certificate, Specialist, or Post-First Professional Certificate or Degree	1.0
Associate Degree	2.0
Bachelor Degree	4.0
Master Degree	5.0
Doctoral Degree	6.0

Weighting Specifications – Degree Type

STEM Credentials	3.0
High Demand Credentials	1.5
All Other Credentials	1.0

Weighting Specifications – Student Characteristics

	Undergrad Level	Graduate Level
All Students	1.00	1.00
Underserved Race/Ethnicity	0.29	0.29
Underserved Income	0.29	N/A
Underserved Academic	0.29	N/A
Adult (25 to 54)	0.29	N/A

### **Progression**

For programs requiring more than one semester to complete, progression toward a credential must be measured. A student's progression towards a degree will be recognized. In addition, the unique characteristics of students should be measured to recognize the additional resource needs of institutions which serve students' needs. Characteristics include underserved race and ethnicity, underserved income, age, and underserved academic.

The Progression Metric is weighted at thirty percent (30%) of the effectiveness category. The metric includes the average number of progression goals met by undergraduate students at the accumulation of 15 hours, 30 hours, 45 hours, 60 hours, and 90 hours over the most recent three academic years. Consideration is given to progression goals met by students who contribute to closing the attainment gap of underserved populations in Arkansas.

#### **Weighting Specifications – Student Characteristics**

All Students	1.00
Underserved Race	0.29
Underserved Income	0.29
Underserved Academic	0.29
Adult (25 to 54)	0.29

### **Transfer**

Many students begin their post-secondary work at a community college before transferring to a university to complete a bachelor's degree. The efficient and effective transfer of these students should be measured to encourage collaboration among institutions.

The Transfer Metric is weighted at fifteen percent (15%) of the effectiveness category. The metric includes the average of the number of students over the most recent three academic years who earn a Bachelor's degree that transferred from a 2-year to a 4-year institutions in an effort to encourage student success and institutional collaboration.

#### **Weighting Specifications – Transfer Students**

Completed Bachelor's Degree	1.0
-----------------------------	-----

### **Gateway Course Success**

Gateway courses in math, English and reading-intensive courses in the humanities and social sciences are a first indicator of likely student success. This is particularly important for students who are underprepared for college-level course work. In addition, the unique characteristics of students should be measured to recognize the additional resource needs of institutions which serve

these students. The designated characteristic for this metric includes underserved academic.

The Gateway Course Success Metric is weighted at fifteen percent (15%) of the effectiveness category. The metric includes the average of the number of successfully completed gateway courses by academically prepared and academically underserved students over the most recent three academic years. The metric recognizes the completion of math, English and reading gateway courses by students with a grade of A, B, or C. Gateway courses completed by academically underserved students will receive additional weighting.

**Weighting Specifications – Gateway Course Success**

Placement in Remedial Course	3.00
No Placement in Remedial Course	1.00

**Affordability Category**

**Time to Degree**

Affordability of a credential is impacted by the length of time it takes a student to earn a credential. Measures should encourage students to complete credentials on time; generally, two years for an associate’s degree and four years for a bachelor’s degree.

The Time to Degree metric is weighted at fifty percent (50%) of the affordability category. The metric includes the average of the number of students who graduated within the recommended timeframe for Associate and Bachelor’s degrees over the most recent three academic years. On time is defined as 24 months for Associate degrees and 48 months for Bachelor’s degrees. The metric also recognizes students who complete their degree within twenty-five percent (25%) of on-time completion (up to 30 months for Associate degrees; up to 60 months for Bachelor’s degree) and within fifty percent (50%) of on-time completion (up to 36 months for Associate degrees; up to 72 months for Bachelor’s degree).

**Weighting Specifications – Time to Degree**

On-Time Completion	1.0
Within 25% of On-Time Completion	0.875
Within 50% of On-Time Completion	0.4

**Credits at Completion**

Similar to time to degree, measuring the affordability of a credential also includes measuring the number of credit hours a student completes toward that credential. Students whose credit hour accumulation is at or near the minimum number required for a credential pay less in tuition and fees; thus, making the credential more affordable.

The Credits at Completion metric is weighted at fifty percent (50%) of the affordability category. The metric includes the average of the number of students who graduated within the scheduled number of credits completed for Associate and Bachelor's degrees over the most recent three academic years. On Schedule is defined as 60 credit hours for Associate degrees and 120 credit hours for Bachelor's degrees. The metric also recognizes students who complete their degree within ten percent (10%) of on schedule completion (up to 66 credit hours for Associate degrees; up to 132 credit hours for Bachelor's degrees) and within twenty-five percent (25%) of on schedule completion (up to 75 credit hours for Associate degrees; up to 150 credit hours for Bachelor's degrees).

**Weighting Specifications – Credits at Completion**

On Schedule	1.00
Within 10% of On Schedule Completion	0.875
Within 25% of On Schedule Completion	0.4

**Research Adjustment**

**Research**

One unique mission of some public universities that is not adequately captured in productivity measures is research and should be included as an adjustment to appropriate institutions. Research is essential to the discovery of new knowledge, innovation, entrepreneurship, and societal, health, and economic development advancements.

The research adjustment will be recognized by adjusting the productivity index score of an institution by the three-year average percentage of expenditures on research. This applies only to institutions with a research mission that spend more than 5% of all expenditures on research activities.

**Weighting Specifications – Research Adjustment**

Research Expenditures/Total Expenditures	Adjustment %
For institutions whose research expenditures exceed 5% of total expenditures. (Based on 3-year average)	Actual % of Research Expenditures

**Efficiency Category**

**Core Expense Ratio**

This measure is intended to encourage resource allocations which maximize spending in areas that directly impact student success and achievement of institutional mission.

The Core Expenses Ratio is weighted at fifty percent (50%) of the efficiency category. The ratio measures the expenditures on the core functions of an institution compared to the expenditures for institutional support and how the ratio compares to an institution's Southern Regional Education Board (SREB) institution peer group.

The Core Expense Ratio is equal to the sum of Instruction Expenditures, Academic Support Expenditures, Student Services Expenditures, Public Service Expenditures and Research Expenditures on a per full-time equivalent (FTE) basis divided by the Institutional Support Expenditures per FTE. Data for these expenditure elements are reported to and published by the Integrated Postsecondary Education Data System (IPEDS).

The adjustment for each institution is calculated by finding the percentage deviation of the Core Expense Ratio of each institution compared to the SREB Average Core Expense Ratio for their peer group. The resulting percentage is assigned an efficiency adjustment as described in the chart below.

#### Weighting Specifications – Core Expense Ratio

% Deviation of ration from SREB Peer Group	% Change to Productivity Index score
Below -20.01%	-2.0%
-15.01% to -20%	-1.5%
-10.01% to -15%	-1.0%
-5.01% to -10%	-0.5%
-5% to 5%	0.0%
5.01% to 10%	0.5%
10.01% to 15%	1.0%
15.01% to 20%	1.5%
Above 20%	2.0%

#### Faculty to Administrator Salary Ratio

This measure is intended to encourage efficient use of administrative positions to support institutional mission.

The Faculty to Administrator Salary Ratio is weighted at fifty percent (50%) of the efficiency category. The ratio measures the expenditures on faculty salaries compared to the expenditures on institutional support salaries and how the ratio compares to an institution's Southern Regional Education Board (SREB) institution peer group.

The Faculty to Administrator Salary Ratio is equal to Instruction Salaries & Wages per FTE divided by the Institutional Support Salaries & Wages per FTE. Data for these expenditure elements are reported to and published by the Integrated Postsecondary Education Data System (IPEDS).



The adjustment for each institution is calculated by finding the percentage deviation of the Faculty to Administrator Salary Ratio of each institution compared to the SREB Average Faculty to Administrator Salary Ratio for their peer group. The resulting percentage is assigned an efficiency adjustment as described in the chart below.

Weighting Specifications – Faculty to Administrator Salary Ratio

% Deviation of ration from SREB Peer Group	% Change to Productivity Index score
Below -20.01%	-2.0%
-15.01% to -20%	-1.5%
-10.01% to -15%	-1.0%
-5.01% to -10%	-0.5%
-5% to 5%	0.0%
5.01% to 10%	0.5%
10.01% to 15%	1.0%
15.01% to 20%	1.5%
Above 20%	2.0%

