Productivity Funding Formula

Model Specifications – Year 9

Updated March 2025

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Overview

Act 148 was enacted by the 91st General Assembly and was signed into law by Governor Asa Hutchinson on February 8, 2017. The purpose of Act 148 of 2017 is to adopt a productivity-based funding model for state-supported institutions of higher education.

The Arkansas Division of Higher Education (ADHE) Productivity Funding Formula Model Technical Definitions:

The following pages provide detailed definitions for each category in the productivity funding model. These definitions outline a step-by-step process to generate the productivity data from the Arkansas Higher Education Information System (AHEIS) and other reports submitted to ADHE. For each metric there is a simplified definition, expanded definition, the required data tables and data elements, and a specific description of how the data will be generated. At the end of each metric description, a Points of Clarification section will provide additional information related to each metric.

Reference to frequently asked questions (FAQs) as well as agency contact information is located at the end of the document.

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Productivity Funding Workgroup

The Productivity Funding Workgroup was established to help create the rules and guidelines needed to measure and determine the productivity funding model metric scores. They meet as needed to review and recommend changes for the model and to address unintended consequences that may be negatively impacting institutions.

The workgroup is comprised of statewide representatives from 4-year universities, 2-year colleges, and system offices. It has members from Presidents/Chancellors, Policy, Finance, and Institutional Research areas. The Chair of the workgroup is Dr. Houston Davis, President of University of Central Arkansas. Below are the members of the workgroup along with their contact information. If you have something you would like to go on the agenda, please send an email to Dr. Houston Davis or Mason Campbell.

Productivity Funding Workgroup 2025			
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Productivity Funding Formula Timeline

Productivity Funding Model Run	Productivity Funding Formula Timeline														
	Academic/Fiscal Year														AHECB Board Approval In:
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Year 5															October 2021
5-Year Review of Funding Formula (STEM & High Demand Changes)															
Year 6															July 2022
Year 7															October 2023
Year 8															July 2024
Year 9*															October 2025
Year 10															July 2026
5-Year Review of Funding Formula (STEM & High Demand Changes)															
Year 11															October 2027
Year 12															July 2028

Key:	
	Baseline Year ONLY
	Comparative Year ONLY
	Included in BOTH Baseline and Comparative
	Calendar Year of Model Run and AHECB Approval
	Fiscal Year Impacted by Model Run
*	Current Year Run

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Summary of Measures

The productivity funding formula consists of four measures: Effectiveness, Affordability, Adjustments, and Efficiency. Each measure contains certain metrics:

Effectiveness	Affordability	Adjustment	Efficiency
♦ Credentials ♦ Progression ♦ Transfer Success ♦ Gateway Course Success	♦ Time to Degree ♦ Credits at Completion	♦ Research (4-year only) ♦ Diseconomies of Scale (2-year only)	♦ Core Expense Ratio ♦ Faculty to Administrator Salary Ratio

The Post-Completion Success metric and Non-Credit Workforce Training and Education metric are not included in the formula but will be considered when adequate data is available. Other future model modifications, such as an addition of an inflationary index, will be considered when necessary.

In the formula, institutions receive points based on the requirements of each metric. Points are totaled and applied according to the weight of the metric. Once the points for the Effectiveness and Affordability measures are totaled, the Adjustments will be applied to the points accordingly. Finally, the Efficiency measure will be applied against the adjusted total. This final total of points will become the institution's **Productivity Index**. That Productivity Index is compared to the prior year's index for that institution. **For example, for the Year 9 model run in 2025 the Productivity Index uses data averages from the Baseline subset of AY2021, AY2022, and AY2023 and compares it to the 3-year average from the Comparative subset of AY2022, AY2023, and AY2024**. The difference in the Baseline Index and the Comparative Index is the Change in Productivity Index. This percent change determines the distribution of funding. For more information on how the distribution of funding will occur once the Change in Productivity Index is determined, please refer to the Funding Distribution Policy.

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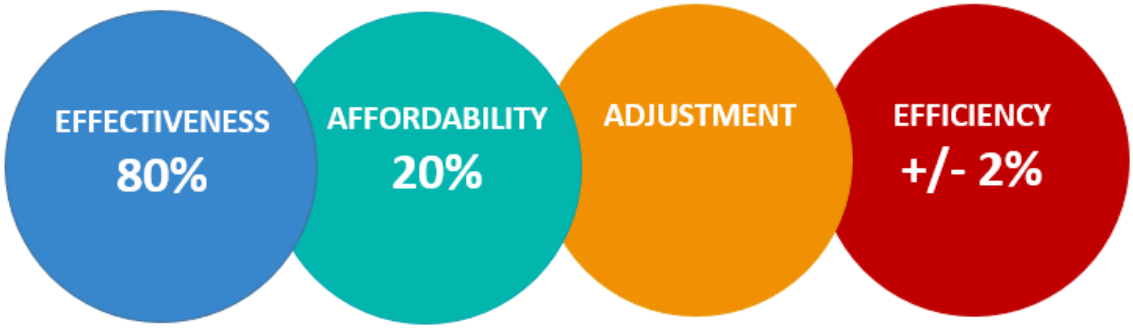
Productivity Weighting

Each metric within the Productivity Funding Model has an assigned weight within the model as a whole. In 2019, changes to the Model were approved which created differences in the weightings between 4-Year Universities and 2-Year Colleges.

4 Year Universities



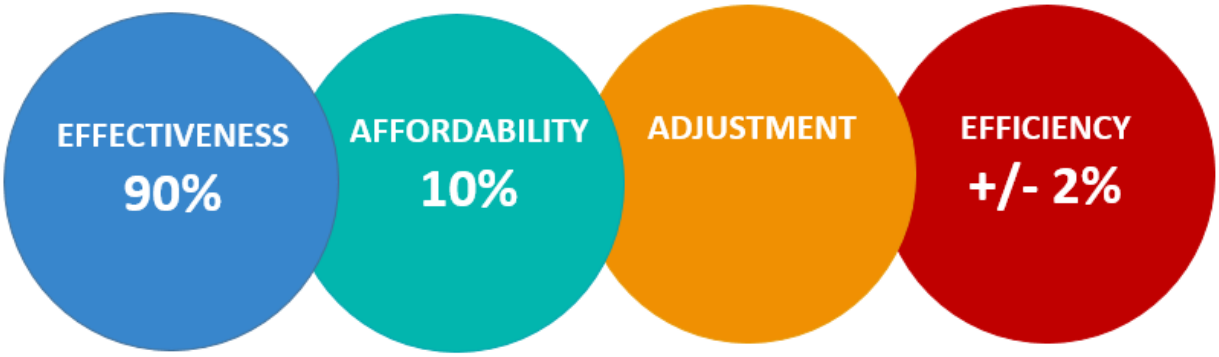
METRICS
- Credentials
  32% Model
- Progression
  24% Model
- Transfer Success
  12% Model
- Gateway Course Success
  12% Model

METRICS
- Time to Degree
  10% Model
- Credits at Completion
  10% Model

METRICS
- Research
  (4-Year Only)

METRICS
- Core Expense Ratio
- Faculty to Admin Salary Ratio

2 Year Colleges



METRICS
- Credentials
  45% Model
- Progression
  20% Model
- Transfer Success
  15% Model
- Gateway Course Success
  10% Model

METRICS
- Time to Degree
  5% Model
- Credits at Completion
  5% Model

METRICS
- Diseconomies of Scale (2-Year Only)

METRICS
- Core Expense Ratio
- Faculty to Admin Salary Ratio

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Subset Types

Multiple categories of the formula use four years of institutional data. The first three years of the dataset are compared to the last three years of the dataset to determine productivity.

Baseline	Comparative
The average of the initial three years of the dataset. For the Year 9 Productivity model run baseline years include academic years 2021, 2022, and 2023.	The average of the last three years of the dataset. For the Year 9 Productivity model run comparative years include academic years 2022, 2023, and 2024.

Student Attribute Table

To simplify the Productivity calculation process, a student attribute table containing all relevant years of data has been created using various AHEIS table variables. Attribute table variables include:

Academic Year	Student Name	Underserved Income
Fice Code	Date of Birth	Underserved Academic
School Abbreviation	Age (25-54)	Minimum Math Gateway Year
Institution Type	Black	Minimum Reading Gateway Year
SSN_ID	Hispanic	Minimum English Gateway Year
Graduate Student Flag	Underserved Race	

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Funding Model Definitions – Credentials

Simplified Definition:	
In the Credentials metric institutions receive points for all credentials awarded, with special consideration for credentials earned by students who contribute to closing the attainment gap of underserved populations in Arkansas as well as credentials that meet state workforce needs.	
Expanded Definition:	
The model includes the number of credentials earned in all degree levels: Certificate of Proficiency (less than 9 credit hours), Certificate of Proficiency (9 or more credit hours), Technical Certificate, Associate Degree, Advanced Certificate, Bachelor's Degree, Post-Baccalaureate Certificate, Master's Degree, Post-Master's Certificate, Specialist, and Doctoral Degree. Credentials can earn additional weights in STEM and High Demand fields.	
Data Sources:	Tables
AHEIS Primary Data Files Submitted by Institutions:	Student Graduated Student Course Registration Student Financial Aid
AHEIS Secondary Tables:	Fice Code Degree Fice Year
Support tables defined by DHS/ICE, the Arkansas Workforce Connections & the Productivity Funding Workgroup:	STEM CIP Code High Demand CIP Code
Specific Metric Criteria: Underserved Student Characteristics	
Race/ethnicity Data from Attribute Table	Student reported as either Hispanic or Black/African American by ***your*** institution. Example: For AY2024, a student would be identified as underserved race/ethnicity if student was reported by ***your*** institution as either Hispanic or Black/African American for the academic year of the credential. If there is not a student record for that academic year, the previous academic year is reviewed. If there is still no student record, then the race reported in the graduated student table is used. ♦ When a student record is available in the attribute table, the race is used to set the attribute flag. The program does not continue to review prior year student data or graduated student file data.

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Race/ethnicity (continued)	♦ Non-US residents are excluded from receiving underserved student category points, however, the credentials they receive do receive points. ♦ The underserved race/ethnicity characteristic applies to both undergraduate and graduate credentials.
Income	Undergraduate student received a Pell Grant > $0 in at least one of the four most recent academic years at ***your*** institution. Example: For credentials awarded in AY2024, the student would be identified as underserved income if student received a Pell Grant > $0 from **your** institution between AY2021 and AY2024.
Academic	Undergraduate student enrolled in at least one remedial course at ***your*** institution. Example: For AY2024, the student would be identified as underserved academic if student previously enrolled in at least one remedial math OR English OR reading course at ***your*** institution. ♦ For a student to be identified as an underserved academic student, he or she would require previous registration in a remedial course. (Course level = '0') ♦ Any remedial courses taken in high school prior to a student's senior year are not reported to ADHE and will not be included. ♦ Grade received in the remedial course is not reviewed as it is assumed student successfully completed remedial course in order to progress and receive the credential.
Age	Undergraduate student is between the ages 25 - 54 at *initial enrollment* at your institution. Age is calculated using the Graduated Student File Institution Admission Date YEAR and student's reported date of birth to calculate age at initial entry to the institution at the undergraduate level. ♦ Age is recalculated if undergraduate student readmits after stop-out. If student stops-out and readmits several times the last readmit date is used to calculate age. ♦ Age is not calculated at the time of the credential but based on the initial enrollment date or readmit academic year.

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Credential Types	
STEM	Credential is in a STEM field identified by the six-digit CIP Code as reported by the Immigrations and Customs Enforcement (ICE) unit of the U.S. Department of Homeland Security. Additional CIP Codes may be approved by the Productivity Funding Workgroup every five years. The AY2016 approved STEM CIP Code list was used for years 1-5 runs of the model, and the AY2021 approved STEM CIP Code list will be used for years 6-10 runs of the model.
High Demand	Credential is in a High Demand field identified by the six-digit CIP Code, reported in the AY2020 AND AY2021 statewide High Demand Occupations Lists published by the Arkansas Workforce Connections. The High Demand CIP Code list will be reviewed every five years for updates. The AY2016 approved High Demand Code list was used for Years 1-5 runs of the funding model, and the AY2021 approved High Demand CIP Code list will be used for years 6-10 runs of the funding model.

Operational Definitions:

The Credentials metric awards an institution points for the number of credentials awarded in all credential levels. The points differ between credential levels for 2-year and 4-year institutions.

The institution receives additional points from a multiplier for credentials listed on the STEM or High Demand CIP Code lists. For 4-year universities if the credential is both STEM and High Demand, the STEM designation would apply. For 2-year colleges the multiplier for STEM and High Demand is equal.

The institution receives additional points from a multiplier for credentials awarded to students meeting the underserved student criteria in race/ethnicity, income, academic, and age. These additional points only apply to a student's first bachelor's degree.

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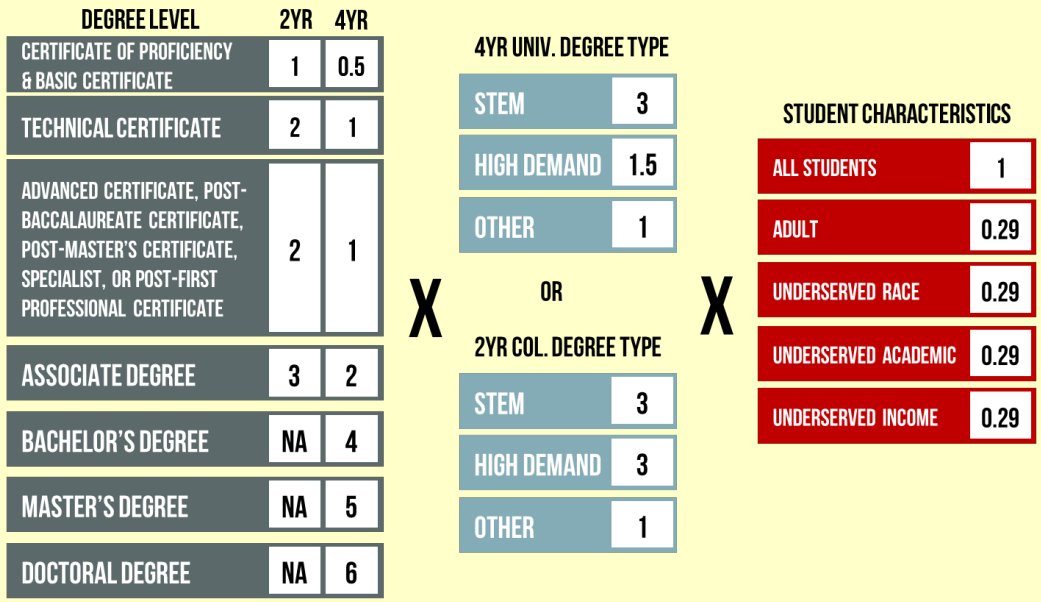

Baseline subset AYs Comparative subset AYs	2021, 2022, 2023 2022, 2023, 2024

The average of all earned points of the three-year baseline subset is compared to the average of the three-year comparative subset resulting in a percent change used in the formula calculation.

Points of Clarification:

- This metric counts credentials and not students receiving the credentials. If a student received more than one credential, they would receive points for all credentials received.
- In the Credentials metric, the only underserved student characteristic that uses the student attribute table is race/ethnicity.
- The STEM and High Demand CIP Codes were updated to reflect changes made to CIP Codes by NCES with the release of the CIP 2020 list.

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Funding Model Definitions – Progression

Simplified Definition:	
In the Progression Metric institutions earn points as undergraduate students pass specific Progression goals.	
Expanded Definition:	
The model awards points to institutions based on the number of all high school and undergraduate students who reach a progression goal during a given academic year. Progression points earned by underserved students in the areas of race/ethnicity, income, academic preparedness, and age will receive additional weight.	
Data Sources:	
AHEIS Primary Data Files Submitted by Institutions: AHEIS Secondary Tables:	Student Registration / End-of-Term Credit Course Fice Code
Specific Metric Criteria: Underserved Student Characteristics	
Race/ethnicity Data from Attribute Table	If student was reported by ***your*** institution as either Hispanic or Black/African American in the last term reported for that academic year **OR i**f student earned hours at another institution that reported their race as Hispanic or Black/African American in the last term reported for that student for that academic year. ♦ Non-US residents are excluded from receiving underserved student category points, however, they are included in the overall Progression metric and do receive points for passing progression goals.
Income Data from Attribute Table	Student received a Pell Grant > $0 in at least one of the two most recent academic years at your institution **OR** at another institution student attended and earned credit hours that contributed to the total earned credit hours for that academic year. Example: For AY2024, the student would be identified as underserved income if student received a Pell Grant > $0 in either AY2023 or AY2024 at **your** institution **OR** if same student received a Pell Grant > $0 in either AY2023 or AY2024 at another institution and earned hours at both institutions.
Academic	Student enrolled in at least one remedial course at your institution in this academic year **OR** student enrolled in at least one remedial

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Data from Attribute Table	course at another institution student attended and earned credit hours that contributed to the total earned credit hours for this AY.
Age	Student must turn 25 during AY but cannot turn 55 during AY.

Other Criteria:	
Beginning AY	Total undergraduate student credit hours earned through AY2024 at all institutions.
Baseline subset AYs Comparative subset AYs End-of-term grades 2-Year Progression Goals 4-Year Progression Goals AHEIS Course Levels AHEIS Student Level	2021, 2022, 2023 2022, 2023, 2024 Passing grades include A, B, C, D, CR, S 15, 30 and 45 earned credit hours 15, 30, 45, 60 & 90 earned credit hours 1 – Lower level 2 – Upper level 00 - Unclassified undergraduate 01 - Freshman 02 - Sophomore 03 – Junior 04 – Senior 13 – High School Underclassman 14 – High School Senior

Operational Definitions:

Total undergraduate student credit hours earned through AY2024 from all institutions attended (including hours earned as a high school student) is totaled to begin the Progression calculation. Points are awarded based on the number of progression goals a student passed each year. This includes credit hours earned by the student at all institutions attended within the academic year.

- If the student earned 90 or more credit hours they are excluded from the 4-Year Progression metric. This eliminates Post-Baccalaureate students from the Progression calculation.
- If a student earned 45 or more hours they are excluded from the 2-Year Progression metric.
- If a student reaches a progression goal and is enrolled at more than one institution that academic year, each institution that contributed to the progression goal will receive the credit.

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Example:
A student attending a 4-year university on July 1, 2023, had accumulated 32 earned credit hours. On June 30, 2024, the student had accumulated 65 earned credit hours. During this academic year, the student took 6 hours at a 2-year college. The 4-year university will earn two progression points for the student passing the 45 and 60-hour progression goals. The 2-year college will receive one progression point for the student passing the 45-hour progression goal.

The chart below indicates the progression points available for both 2-year colleges and 4-year universities.

PROGRESSION GOAL	2 YEAR	4 YEAR
15 HOURS	1	1
30 HOURS	1	1
45 HOURS	1	1
60 HOURS	N/A	1
90 HOURS	N/A	1

×

STUDENT CHARACTERISTICS	
All Students	1
Underserved Race	0.29
Underserved Income	0.29
Underserved Academic	0.29
Adult (25 to 54)	0.29

Baseline subset AYs	2021, 2022, 2023
Comparative subset AYs	2022, 2023, 2024

The average of all earned points of the three-year baseline subset is compared to the average of the three-year comparative subset resulting in a percent change used in the formula calculation.

Points of Clarification:

- The Progression metric involves cross referencing AHEIS data from all public institutions in the state. Because of this cross-referencing this is not a metric an institution can reproduce on its own. The data from outside institutions will be provided in the metric files when run by ADHE for internal checks.
- If the student is identified as an underserved population at any institution at which that student attended for that academic year, the student will be considered underserved for this metric.
- It is important all Incomplete (I), In Progress (IP), and Not Reported (NR) grades be reconciled from the End-of-Term submission using a Grade Update File (GUP) for an institution to receive all deserved progression points.

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Transfer Metric – 4-Year Universities

Simplified Definition:	
The Transfer metric encourages collaboration between 2-year colleges and 4-year universities to promote student success.	
Expanded Definition:	
4-year universities will earn points for undergraduate students who have successfully transferred from a 2-year college and who earn a Bachelor's degree.	
AHEIS **Data Sources:**	
AHEIS Primary Data Files Submitted by Institutions: AHEIS Secondary Table:	Graduated Student Student Fice Code
Specific Metric Criteria:	
AHEIS Credential Academic Years AHEIS Credential Degree Level AHEIS Enrollment Status AHEIS Institution Type	2021, 2022, 2023, 2024 05 – Bachelor's Degree 03 – First-Time Entering Undergraduate Transfer at 4-Year University 2 – Two-Year College
Operational Definitions:	

4-year universities receive points for undergraduate students who graduate with a Bachelor's degree who meet the following criteria:

- 4-Year university reported student as earning a Bachelor's Degree in AY2021, AY2022, AY2023, AY2024
- Student attended an Arkansas public 2-year college
- Student transferred to 4-year university within three years of last attendance at the 2-year college

TRANSFER FACTOR	4-YEAR
Completed Bachelor's Degree	1

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Baseline subset AYs Comparative subset AYs	2021, 2022, 2023 2022, 2023, 2024
The average of all earned points of the three-year baseline subset is compared to the average of the three-year comparative subset resulting in a percent change used in the formula calculation.	
Points of Clarification:	
♦ The Transfer Metric only looks at transfers from an in-state, public, 2-year college to an in-state, public, 4-year university.	

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Transfer Metric – 2-Year Colleges

Simplified Definition:	
The Transfer metric encourages collaboration between Arkansas 2-year colleges and 4-year public and private/independent universities to promote student success.	
Expanded Definition:	
2-year colleges earn points for undergraduate students who transfer successfully to a 4-year university with an Associate degree or with at least 30 earned ACTS course hours. Students who have received an Associate degree will be weighted more heavily.	
AHEIS Data Sources:	
AHEIS Primary Data Files Submitted by Institutions: AHEIS Secondary Tables:	Student Registration Credit Course Graduated Student ACTS Course Fice Code
Specific Metric Criteria: 2-Year Associate Degree Transfer Metric	
AHEIS Degree Level AHEIS AY of Transfer to 4-Year AHEIS Institution Type AHEIS Enrollment Status	03 – Associate Degree 2021, 2022, 2023, 2024 1 – 4-Year Public or Private/Independent Universities 03 – First-Time Entering Undergraduate Transfer at 4-Year University
Specific Metric Criteria: 2-Year 30 + ACTS Hours Transfer Metric	
Total ACTS Course Hours AHEIS Course Levels AHEIS Institution Type AHEIS Enrollment Status	> or = 30 Credit Hours 1 – Lower level 2 – Upper level 1 - 4-Year Public or Private/Independent Universities 03 – First-Time Entering Undergraduate Transfer at 4-Year University

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Operational Definition:

2-Year College Associate Degree Transfer Metric:
2-year colleges receive points for students who graduate from their college with an Associate degree and enroll as a transfer student at an Arkansas 4-year public university **OR** a 4-year Arkansas private/independent, institution within three years after completing the Associate degree.

2-Year College 30 or More ACTS Credit Hours Transfer Metric:
2-year colleges receive points for students who have earned 30 or more ACTS credit hours with a grade of A, B, C, D, CR, or S and then enroll as a transfer student at a 4-year public university **OR** a 4-year Arkansas private/independent, institution within three academic years of their last enrollment at the 2-year college. Institutions will not receive points in the 30(+) ACTS Hours metric for students who have already earned an Associate degree.

TRANSFER FACTOR	2-YEAR
Transferred with 30 or more ACTS hours	1
Transferred with Associate Degree	1.25

Baseline subset AYs Comparative subset AYs	2021, 2022, 2023 2022, 2023, 2024

The average of all earned points of the three-year baseline subset is compared to the average of the three-year comparative subset resulting in a percent change used in the formula calculation.

Points of Clarification:

- The Transfer Metric only looks at transfers from an in-state, public, 2-year college to an in-state, 4-year public OR private/independent university.
- Institutions will not receive points in the 30(+) ACTS Hours metric for students who have already earned an Associate degree.

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Gateway Course Success Metric

Simplified Definition:	
Completion of gateway courses contributes to student progression and degree attainment.	
Expanded Definition:	
Institutions earn points for students completing math, English and reading gateway courses with an earned grade of A, B, C, S, or CR. Each student receives credit for passing one course per gateway subject. Academically underserved students will be weighted more heavily.	
Data Sources:	
AHEIS Primary Data Files Submitted by Institutions:	Student Registration / End-of-Term Credit Course
AHEIS Secondary Tables:	Fice Code
Specific Metric Criteria:	
Academic Year	2021, 2022, 2023, 2024
Math Gateway	Student passed Math Gateway
Math Gateway with Remediation	Student passed Math Gateway and required Math remediation
English Gateway	Student passed English Gateway
English Gateway with Remediation	Student passed English Gateway and required English remediation
Reading Gateway	Student passed Reading Gateway
Reading Gateway with Remediation	Student passed Reading Gateway and required Reading remediation
AHEIS Student Level	2-Year – All (00,01,02,13,14) 4-Year – Undergraduates excluding all high school students (00,01,02,03,04,10)

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Operational Definition:

This metric awards points to institutions for students who earn a grade of A, B, C, S, or CR in an approved Arkansas Course Transfer System (ACTS) general education course in math, English and reading, or ADHE approved terminal subject area course.

The ACTS Course name and number of the approved gateway courses are listed in the table below. Each institution will receive additional points for a student who is identified as academically underserved by registration in a remedial course in Math, English or Reading within the last five years prior to the successful completion of the gateway course in that subject. For example, if student completed their first Math Gateway course in AY2024, the institution would receive additional points if student took remedial math anytime between AY2019 and AY2024.

The institution will earn points for the student's completion of the first gateway course in each subject area. For example, if student completed their first Math Gateway course in AY2023, the institution would receive a point, however, if the same student completed another Math Gateway course in AY2024 the institution would not receive a point since the student had already passed a Math Gateway course in AY2023.

A list of approved course exceptions which have been added to the Approved Gateway Course List for specific institutions may be provided upon request.

Gateway Course Subject Area	ACTS Course Name	Approved ACTS Course Number
Math	College Math	MATH1003
	Technical Math	MATH1013
	Quantitative Literacy	MATH1113
	College Algebra	MATH1103
	Plane Trigonometry	MATH1203
	Pre-Calculus	MATH1305
	Introduction to Statistics	MATH2103
	Survey of Calculus	MATH2203
	Calculus I	MATH2405
	Calculus II	MATH2505
	Calculus III	MATH2603
English	Composition I	ENGL1013
	Composition II	ENGL1023
	Technical Writing	ENGL2023

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Gateway Course Subject Area	ACTS Course Name	Approved ACTS Course Number
Reading	Introduction to Anthropology	ANTH1013
	Cultural Anthropology	ANTH2013
	World Literature I	ENGL2113
	World Literature II	ENGL2123
	Western Literature I	ENGL2213
	Western Literature II	ENGL2223
	American Literature I	ENGL2653
	American Literature II	ENGL2663
	British Literature I	ENGL2673
	British Literature II	ENGL2683
	World Civilizations I	HIST1113
	World Civilizations II	HIST1123
	Western Civilizations I	HIST1213
	Western Civilizations II	HIST1223
	United States History I	HIST2113
	United States History II	HIST2123
	Philosophy	PHIL1103
	American National Government	PLSC2003
	State and Local Government	PLSC2103
	General Psychology	PSYC1103
	Developmental Psychology	PSYC2103
	Introduction to Sociology	SOCI1013
	Social Problems	SOCI2013

A student receives credit for the completion of one course per gateway subject at each institution. For example, a student completes U.S. History I and General Psychology at the same institution. Student will receive one point for completing the reading gateway course requirement. The exception to this is if gateway courses are taken at separate institutions. For example, a student takes Composition I at Institution A and then transfers to Institution B where he/she takes Composition II. Both institutions will receive one point for the student completing an English gateway course at that institution.

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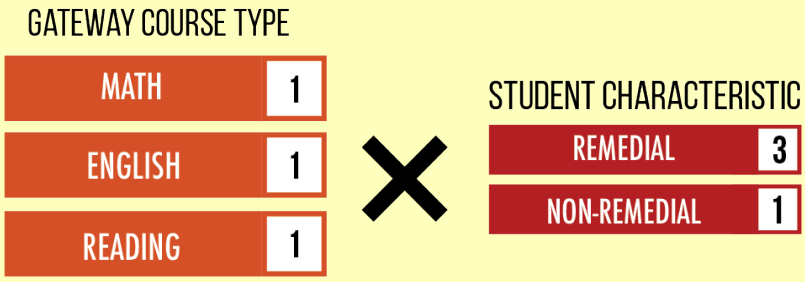

Baseline subset AYs	2021, 2022, 2023
Comparative subset AYs	2022, 2023, 2024

The average of all earned points of the three-year baseline subset is compared to the average of the three-year comparative subset resulting in a percent change used in the formula calculation.

Points of Clarification:

- In this metric the underserved academic category is broken down by math, English, and reading subjects rather than just being any remediation as used in previous metrics. The institution receives additional points if the student required discipline specific remediation to support completing the gateway course.
- Any remedial courses taken in high school prior to a student's senior year are not reported to ADHE and will not be included in the calculation of underserved academic.
- In the Gateway Course Success Metric, 2-Year colleges receive credit for all students.
- 4-year universities receive credit for undergraduate students, excluding high school students.

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Credits at Completion Metric

Simplified Definition:	
An average of the number of students who graduated within the scheduled number of credits completed for Bachelor's and Associate degrees over the most recent three academic years.	
Expanded Definition:	
The model awards points for students who graduate on schedule. On schedule is defined as completing a Bachelor's degree with 120 credit hours or completing an Associate degree with 60 credit hours. Remedial level coursework as defined by AHEIS is not calculated into the total number of hours a student completed for this metric. Institutions are also given points for students who complete on schedule + 10% or on schedule + 25%. Only Associate degrees and Bachelor's degrees will be measured.	
Data Sources:	
AHEIS Primary Data Files Submitted by Institutions: AHEIS Secondary Table:	Graduated Student Fice Code
Specific Metric Criteria:	
Academic Years Degree Levels Total Earned Credit Hours Completed On Schedule Completed On Schedule +10% Completed On Schedule +25%	2021, 2022, 2023, 2024 Associate and Bachelor's Degrees Completed in 60 or 120 hours Completed in 61-66 hours or 121-132 hours Completed in 67-75 hours or 133-150 hours
Operational Definition:	
For each Associate degree and Bachelor's degree awarded, the student's total completed hours from the graduated student file is used. Remedial level coursework should be excluded from this total. The total credit hours will be divided by the standard required program credits, 60 hours for Associate degree and 120 hours for Bachelor's degree, per AR Code 6-61-232 (2012). That percentage will result in that degree being added to one of three categories: on schedule, on schedule + 10%, and on schedule + 25%. Degrees completed on schedule will result in a full point, whereas degrees completed on schedule + 10% or + 25% will receive a reduced point. Degrees completed	

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with more than 125% of legislated credit needed for that degree will not receive credit in this metric.

CREDIT COMPLETION FACTORS

On Schedule	1
On Schedule + 10%	0.875
On Schedule + 25%	0.4

Baseline subset AYs Comparative subset AYs	2021, 2022, 2023 2022, 2023, 2024

The average of all earned points of the three-year baseline subset is compared to the average of the three-year comparative subset resulting in a percent change used in the formula calculation.

Points of Clarification:

- A list of approved exceptions for the Credits at Completion metric is available upon request. CIP Codes may be approved for extended time in this metric if the external accrediting body for that credential requires an extended time to complete the credential beyond the state legislated 60 or 120 hours.

- For example, AAS in Registered Nursing requires additional hours above the normalized 60 credit hours for an Associate degree by their accrediting body.

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Time to Degree Metric

Simplified Definition:	
An 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.	
Expanded Definition:	
Institutions are assigned a score based on the number of students that graduate on time. On time is defined as 24 months for Associate degrees and 48 months for Bachelor's degrees. Points will also be garnered for students who complete their degree on time + 25% (30 months; 60 months) or on time + 50% (36 months; 72 months). Only Associate degrees and Bachelor's degrees will be measured. Other certificates and degrees will not be counted in this metric	
Data Sources:	
AHEIS Primary Data Files Submitted by Institutions: AHEIS Secondary Tables:	Graduated Student Fice Code
Specific Metric Criteria:	
Academic Years	2021, 2022, 2023, 2024
Degree Levels	Associate and Bachelor's Degrees
Initial Admit Date	Student's Initial Admit Date to Institution
Graduation Date	Graduation Date
Time to Degree in Months	Calculated using Initial Admit Date and Graduation Date
Completed On Time	Completed in 24 months or 48 months
Completed On Time + 25%	Completed in 25-30 months or 49-60 months
Completed On Time + 50%	Completed in 31-36 months or 61-72 months
Operational Definition:	
Only students who entered the institution as a first-time, full-time, degree-seeking undergraduate student (traditionally thought of as the IPEDS cohort) will be included in the cohort for this metric. For each Associate and Bachelor's degree awarded, the total number of months the student took to complete their degree at that institution will be measured.	

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That total number of months will be divided by the standard number of months required for students to complete their degree on time (24 months for an Associate degree; 48 months for a Bachelor's degree). That percentage will result in that degree being added to one of three categories: on time, on time + 25%, and on time + 50%.

Degrees completed on time will result in one point; degrees completed on time + 25% or + 50% will receive a reduced point.

TIME TO DEGREE FACTORS

On Time	1
On Time + 25%	0.875
On Time + 50%	0.4

Baseline subset AYs Comparative subset AYs	2021, 2022, 2023 2022, 2023, 2024

The average of all earned points of the three-year baseline subset is compared to the average of the three-year comparative subset resulting in a percent change used in the formula calculation.

Points of Clarification:

- Time to Degree is the only metric that uses the traditional IPEDS cohort definition of First-time, Full-time, Degree-Seeking.
- For degree programs with approved exceptions to the total number of credits at completions the time to degree months will be adjusted to reflect the additional hours required for completion.

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Research Adjustment – 4-Year Universities

Simplified Definition:

Research is essential to the discovery of new knowledge, innovation, entrepreneurism, and societal, health, and economic development advancements. 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.

Expanded Definition:

This metric increases the comparative years score of institutions who invest in research by a percentage based on the ratio of research expenditures to total expenditures of the institution as reported to IPEDS.

Data Sources: IPEDS Finance Survey

Specific Metric Criteria:

IPEDS Finance Survey Data:	Institution Name State Abbreviation Sector of Institution	Research Total Expenses Deductions

Operational Definition:

The adjustment for each institution is calculated by finding the percentage of research expenditures to total institutional expenditures as reported on most recently published IPEDS. A 3-year average of the Research expenditures will be used to calculate a research percentage. The resulting percentage is multiplied by the comparative year index score to determine the adjustment.

RESEARCH ADJUSTMENT FACTORS	% INCREASE
FOR INSTITUTIONS WHOSE RESEARCH EXPENDITURES IS GREATER THAN 0% OF THEIR TOTAL EXPENDITURES	RESEARCH TO EXPENSE RATIO >0%-<5% = 1% ADJ 5%-10% = 1.5% ADJ >10% = 2% ADJ

Points of Clarification:

- Applies to 4-year universities with research expenditures only.
- Due to the one-year delay in the publishing of IPEDS data, the score calculated in this metric will always be one year prior to other data used in the formula.
- In 2019, policy was changed on how the Research Adjustment is calculated. This adjustment is now applied *only* to the comparative years score and does not apply to the baseline score of the model.

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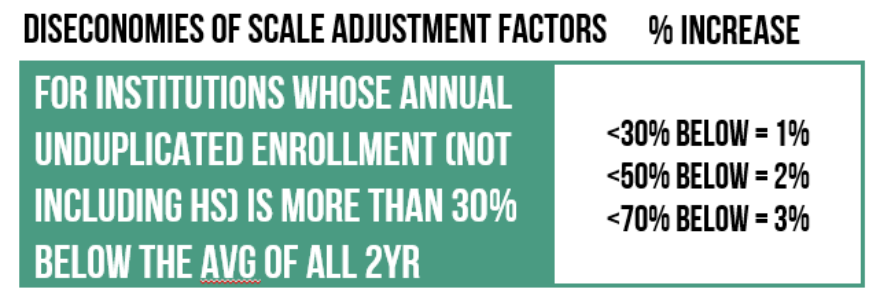
Diseconomies of Scale Adjustment

2-Year Colleges

Simplified Definition:	
Adds % increase to scores of 2-yr colleges serving a small population of students.	
Expanded Definition:	
This adjustment is to recognize that institutions must maintain certain student services regardless of the institution's student enrollment size. This metric increases the index score of a 2-year college that falls into a specified student enrollment size range. The range is based on average three-year enrollment for all 2-year colleges.	
Data Sources:	
AHEIS Primary Table:	Student
Specific Metric Criteria:	
Annual unduplicated headcount not including all high school students Academic Years: 2022, 2023, 2024	
Operational Definition:	
The score for each institution is calculated by finding the average enrollment for 2-year colleges as the baseline for comparison. The institution's enrollment will be calculated by averaging the annual unduplicated headcount of students NOT including high school/concurrent (enroll_status=13 or 16) for the most recent three academic years. This adjustment is applied to the comparative years total only.	



Points of Clarification:

- Applies to 2-year colleges only.
- In 2019, policy was changed and is now applied *only* to the comparative years score and does not apply to the baseline score of the model.

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Core Expense Ratio

Simplified Definition:
Measures the core expense ratio of each institution as compared to its SREB peer group.
Expanded Definition:
Core Expense Ratio is equal to the sum of Instruction Expenditures, Academic Support Expenditures, Student Services Expenditures, Public Service Expenditures and Research Expenditures (all per FTE) divided by the Institutional Support Expenditures per FTE.
Data Source: IPEDS Finance Survey
Specific Metric Criteria:
Institution (entity) Name State Abbreviation Sector of Institution Instruction Research Public Service Academic Support Student Services Institutional Support 12-Month Full-time Equivalent Enrollment Carnegie Classification 2018/2021: Graduate Instructional Program and Undergraduate Instructional Program (4-Year Universities) Carnegie Classification 2018: Basic (2-Year Colleges)
Operational Definition:
The Core Expense Ratio will look at the most recent three years of published IPEDS data. Because it will use published IPEDS data the years of data used will always be one year prior to other data used in the formula. The Core Expense Ratio is calculated by taking the sum of IPEDS reported Instruction Expenditures, Academic Support Expenditures, Student Services Expenditures, Public Service Expenditures and Research Expenditures (all per FTE) divided by the Institutional Support Expenditures per FTE. This ratio will be calculated for each of the most recent three years and then will be averaged.

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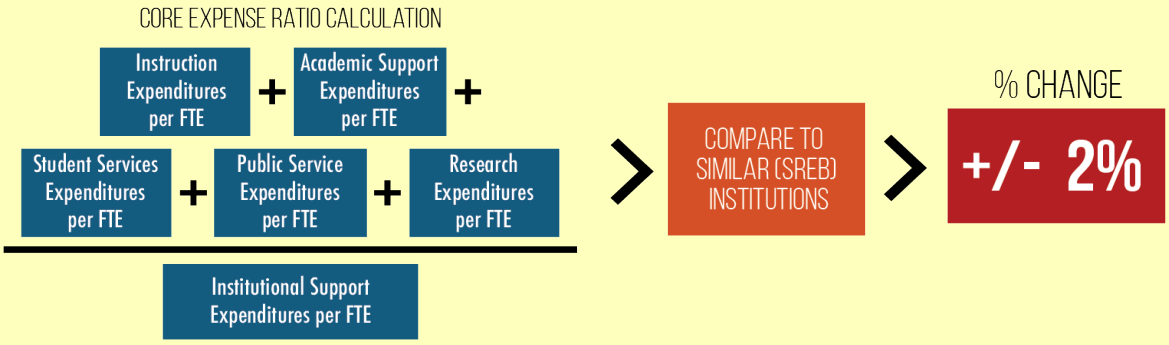

The baseline group that the institutional Core Expense Ratio will be compared to is the institution's SREB peer group. The SREB peer group will be defined as all SREB institutions outside of the state of Arkansas who are in the same Carnegie Classification as the institution who report FTE data to SREB.

4-year institutions

- 25 or more approved graduate level degree programs – 2018/2021 Graduate Instructional Carnegie Classification
- Less than 25 approved graduate level degree programs – 2018/2021 Undergraduate Instructional Carnegie Classification

2-year institutions

- 2018 Basic Carnegie Classification

A three-year Core Expense Ratio Average will be calculated for the SREB peer group in the same way that it was calculated for the institution.

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 effectiveness adjustment as described in the chart below.

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COMPARE TO SIMILAR (SREB) INSTITUTIONS	% CHANGE
Below -20.01%	-2%
-15.01% to -20%	-1.5%
-10.01% to -15%	-1%
-5.01% to -10%	-0.5%
-5% to 5%	0%
5.01% to 10%	0.5%
10.01% to 15%	1%
15.01% to 20%	1.5%
Above 20.01%	2%

Points of Clarification:

- This metric is 50% of the Efficiency Category. The Efficiency Category can influence an institution's score by no more than +/- 2%.
- A list of institutions included in the SREB peer group will be provided to each institution.

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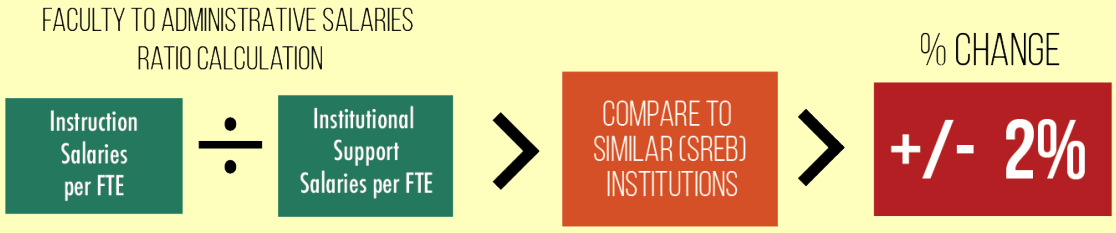
Faculty to Administrative Salary Ratio

Simplified Definition:
Measures the ratio of faculty salaries to administrative salaries at an institution as compared to its SREB peer group.
Expanded Definition:
Faculty to Administrative Salary Ratio is equal to the Instruction Salaries & Wages per FTE divided by the Institutional Support Salaries & Wages per FTE.
Data Source: IPEDS Finance Survey
Specific Metric Criteria:
Institution (entity) Name State Abbreviation Sector of Institution Instruction – Salaries and Wages Institutional Support – Salaries and Wages 12-Month Full-time Equivalent Enrollment Carnegie Classification 2018/2021: Graduate Instructional Program and Undergraduate Instructional Program (4-Year Universities) Carnegie Classification 2018: Basic (2-Year Colleges)
Operational Definition:
The Faculty to Administrative Salary ratio will look at the most recent three years of published IPEDS data. Because it will use published IPEDS data the years of data used will always be one year prior to other data used in the formula. The Faculty to Administrative Salary ratio is calculated by taking the Instruction Salaries & Wages per FTE divided by the Institutional Support Salaries & Wages per FTE. This ratio will be calculated for each of the most recent three years and then will be averaged.      The baseline group that the institutional Faculty to Administrative Salary ratio will be compared to is the institution's SREB peer group. The SREB peer group will be defined as all SREB institutions outside of the state of Arkansas who are in the same Carnegie Classification as the institution.

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4-year institutions

- 25 or more approved graduate level degree programs – 2018/2021 Graduate Instructional Carnegie Classification
- Less than 25 approved graduate level degree programs – 2018/2021 Undergraduate Instructional Carnegie Classification

2-year institutions

- 2018 Basic Carnegie Classification

A three-year Faculty to Administrative Salary Ratio Average will be calculated for the SREB peer group in the same way that it was calculated for the institution.
The adjustment for each institution is calculated by finding the percentage deviation of the Faculty to Administrative Salary Ratio of each institution compared to the SREB Average Faculty to Administrative Salary Ratio for their peer group. The resulting percentage is assigned an effectiveness adjustment as described in the chart below.

COMPARE TO SIMILAR (SREB) INSTITUTIONS	% CHANGE
Below -20.01%	-2%
-15.01% to -20%	-1.5%
-10.01% to -15%	-1%
-5.01% to -10%	-0.5%
-5% to 5%	0%
5.01% to 10%	0.5%
10.01% to 15%	1%
15.01% to 20%	1.5%
Above 20.01%	2%

Points of Clarification:

- This metric is 50% of the Efficiency Category. The Efficiency Category can influence an institution's score by no more than +/- 2%.
- A list of institutions included in the SREB peer group will be provided to each institution.

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Funding Model Scaling Calculations

Simplified Definition:
Scaling is a mathematical formula applied to each metric's raw score for the purpose of equalizing the score ranges.
Expanded Definition:
Each broad metric area (credentials, progression, etc.) results in a raw score based upon a "points" system derived for that metric. The total points that result from one metric can be either much larger or much smaller than the total points generated by another metric. For example, 4-year universities may generate 100,000 points in the "credentials" metric, but only 1,000 points in the "transfers" metric. If these points were simply added together for a total of 101,000 points then credentials would make up (100,000 / 101,000) or 99% of the model and transfers would only make up (1,000 / 101,000) or 1% of the model. This is not the desired result. The funding model specifications detail what percentage of the overall formula each metric should supply. Therefore, all metrics must have equally scaled points before they can be weighted and combined. Because the "credentials" metric usually generates the most points, that metric is used as the standard scale. All other metrics have a multiplier "index" applied to that metric's points so that the total score for the metric for all universities (or all colleges) is equal to the total score for the credentials metric.
Specific Metric Criteria:
Data Year 2 of the Productivity Funding Formula for 4-Year Universities is provided below as an example of how scaling works. Step 1: Using the Baseline Years data, for each institution type (4-Year and 2-Year) total the raw scores of each metric. Step 2: Using the Credentials metric as base, divide each of the other metric raw score totals into credentials, to determine the scaling index. Using the example of Year 2 data, the Progression raw score of 94,479 is divided into the Credentials raw score of 183,380 which gives the scaling index for Progression of 1.94.

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(1) UNSCALED DATA		Effectiveness			
		Credentials	**Progression**	**Gateway Success**	**Transfer Success**
ASUJ	Score	30882	11846	5325	368
ATU	Score	18752	11596	6831	188
HSU	Score	5661	3920	2386	102
SAUM	Score	7250	3977	2451	65
UAF	Score	54779	25877	12453	398
UAFS	Score	9874	8025	5160	36
UALR	Score	25733	9607	4228	310
UAM	Score	5796	4021	2088	24
UAPB	Score	5792	3816	2294	38
UCA	Score	18859	11792	6657	204
4YR	Sum	183380	94479	49874	1733
4YR	Index	1.00	1.94	3.68	105.82

Step 3: Multiply the raw score for each institution by the index score for that metric. In this example, HSU's raw Progression score of 3,920 is multiplied by 1.94 to give a scaled score of 7,609 for Progression.

(2) SCALED DATA		Effectiveness			
		Credentials	**Progression**	**Gateway Success**	**Transfer Success**
ASUJ	Score	30882	22993	19578	38905
ATU	Score	18752	22507	25118	19858
HSU	Score	5661	7609	8774	10829
SAUM	Score	7250	7720	9011	6913
UAF	Score	54779	50227	45789	42115
UAFS	Score	9874	15577	18974	3845
UALR	Score	25733	18647	15547	32768
UAM	Score	5796	7804	7677	2575
UAPB	Score	5792	7408	8435	3986
UCA	Score	18859	22888	24478	21587
4YR	Sum	183380	183380	183380	183380

Step 4: Multiply the model weightings for each metric against the scaled score for each institution to calculate the weighted and scaled score.

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(3) WEIGHTS	Effectiveness				
	Credentials	Progression	Gateway Success	Transfer Success	Effectiveness Index
Category Weights	40%	30%	15%	15%	80%
Model Weights	32%	24%	12%	12%	

(4) WEIGHTED & SCALED DATA		Effectiveness				
		Credentials	Progression	Gateway Success	Transfer Success	Effectiveness Index
ASUJ	Score	9882	5518	2349	4669	22419
ATU	Score	6001	5402	3014	2383	16800
HSU	Score	1811	1826	1053	1299	5990
SAUM	Score	2320	1853	1081	830	6084
UAF	Score	17529	12054	5495	5054	40132
UAFS	Score	3160	3738	2277	461	9636
UALR	Score	8235	4475	1866	3932	18508
UAM	Score	1855	1873	921	309	4958
UAPB	Score	1854	1778	1012	478	5122
UCA	Score	6035	5493	2937	2590	17056
4YR	Sum	58682	44011	22006	22006	146704
4YR	Index	32%	24%	12%	12%	80%

Step 5: Apply Diseconomies of Scale/Research Adjustments and Efficiency Adjustments to the weighted and scaled data to determine the Baseline total score.

Step 6: Using the same Index calculated for the Baseline years, follow the same steps in the Comparative years.

Step 7: Compare each institution's Baseline to Comparative totals to determine the Productivity Index.

Step 8: This ends the calculation of the Productivity Funding Model. The Productivity Index for each institution is then applied to the Productivity Funding Distribution according to that policy.

Points of Clarification:

- The scaling index is not recalculated for the Comparative years. For consistency the Baseline scaling index is used for both data sets.

Funding Model Distribution

Each year the % Change in Productivity Index helps to determine what the recommended funding will be.

Overall State Productivity Recommendation

- Negative Productivity Index Score
  - No additional money is recommended.
  - All new money for institutions with a positive productivity index will come from reallocation.
  - Prior year incentive amount will be used for statewide purposes for the new year.
- Positive Productivity Index Score
  - New money recommendation is prior year RSA Base * Productivity Index
  - All new money for institutions with a positive productivity index will come from both new general revenue funds and reallocation.
  - New general revenue funds are split between 4-year and 2-year institutions based on percentage RSA for each group out of the total state RSA. Example:
    - 4-year RSA base = 440,000,000 and 2-year RSA base = 150,000,000
    - 4-year percent will be 440,000,000/590,000,000 = 74.6%
    - 2-year percent will be 150,000,000/590,000,000 = 25.4%
  - Maximum recommendation in any one year is 2% above prior year.

Individual Institutions Productivity Recommendation

- Starting base RSA is prior year RSA funding minus any prior year incentive funding.
- New funding
  - Percent contribution to Institution type times total state new funds for institution type.
- Reallocated funding
  - Percent contribution to Institution type times total reallocated funds for institution type.
- Max gain per year to base RSA is 2%.
  - Anything over 2% is a one-time incentive funding.
- Max loss per year to base RSA is 2%.
- Max 5-year loss to base RSA is 5%.
  - Percent loss is compared to the base RSA 5 years prior.

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FAQs

Q1. Are concurrent/high school students included in this model?

A1. Concurrent/high school students are included in the credentials and progression metrics for all institutions and the gateway metric for the 2-year colleges.

Q2. How will the new placement policy impact this formula?

A2. The definition of underserved academic is based upon a student who enrolls in a remedial English, math, or reading course. It does not look at the placement test score or the placement test field in the student table. A remedial level course is determined by looking at courses where Course_Level = 0 in the Credit Course File Table.

Q3. We are attempting to pull data internally to look at how we are doing, but our numbers are not matching ADHE's reported numbers. Why can't I get them to match?

A3. It is important to understand that some metrics utilize data at the state level that individual institutions do not have access to. Transfer data, total credit hours taken at all in-state public institutions, and Pell eligibility at multiple campuses, are a few examples of data that may cause internal estimates to differ from numbers produced by ADHE.

Q4. When am I compared to myself vs to other institutions?

A4. In the Effectiveness and Affordability measures institutions are compared to themselves using a rolling three-year comparative average. For example, the baseline subset average of 2021, 2022 and 2023 will be compared to the comparative subset average of 2022, 2023 and 2024. The difference in the averages, either positive or negative, will be used in calculating the institution's Productivity Index.

In the Adjustment measures a three-year average will be calculated but will not be measured against a three-year comparative. The Research category will use the three-year average to calculate percentage of expenditures used on research at that institution. This is not a comparison at all, simply a calculation. The Diseconomies of Scale category will compare the three-year average headcount to the three-year average headcount of 2-year colleges in Arkansas.

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In the Efficiency measures a three-year average will be calculated but will not be measured against a three-year comparative. In these categories, the three-year average will be compared against the three-year average of SREB institutions in that institution's peer group.

Q5. Does this formula use the IPEDS definition of a cohort?

A5. As a whole, this formula does not use the IPEDS definition of a cohort (First-Time, Full-Time, Degree-Seeking in the Fall Semester). Each category defines its cohort differently based upon what is being measured so that it can more accurately represent the populations served by institutions. The only category that uses the IPEDS definition of a cohort is the Time-to-Degree category. Please see each category definition for the details of what makes up each cohort.

Q6. We have a large population of part-time students. Won't this unfairly hurt us in the Progression and Time-to-Degree categories?

A6. No. It is important to remember in the Effectiveness and Affordability metrics, that you will only be compared to yourself. This is not like the old formula where an institution must get a set number of points to be successful. If in the past, only 30 out of 100 graduating students completed their degrees "on-time" because of the high population of part-time students, that is what you will be compared to. In this scenario, 30 out of 100 graduating students completing "on-time" will be considered positive change. This model does not intend to change the mission of an institution.

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Productivity Funding Model
Contact Information

For questions regarding the Productivity metric definitions, related AHEIS data submissions, and the Specifications document, please contact any of the ADHE Data Team at AHEIS@adhe.edu.

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