



COLORADO

**Colorado Commission on
Higher Education**

Department of Higher Education

2016-17
COLORADO HIGHER EDUCATION FUNDING
ALLOCATION MODEL

October 2015

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Introduction

Each year, the Department prepares and the Colorado Commission on Higher Education (CCHE) approves an annual budget request for public colleges and universities, along with a student financial aid calibration. Pursuant to the enactment of H.B. 14-1319, allocations to governing boards are determined through the new higher education allocation and each year thereafter, the November 1 budget request shall include:

- (a) A detailed description of the fee-for-service contract factors, metrics, and values assigned for each
- (b) Specific details for each institution on how the fee-for-service contract is applied, the level of funding requested for each factor and metric.

Following the implementation of the new allocation model for FY 2015-16, the Department, governing boards and CCHE recognized refinements were needed. Beginning in spring 2015, the Department of Higher Education (DHE) convened a Funding Allocation Model Review Team, which was comprised of a representative from each governing board and Office of State Planning and Budgeting (OSPB), to review the allocation model, and to provide and respond to recommended changes to the model. Additionally, the Joint Budget Committee (JBC) provided seven (7) Requests for Information (RFI) related to the funding allocation model.

The overarching goals of the review process and subsequent changes to the allocation formula were to provide a simple, clear and sustainable model that implements the legislation and provides incentives to institutions to meet the policy objectives of the Colorado Commission on Higher Education's Master Plan.

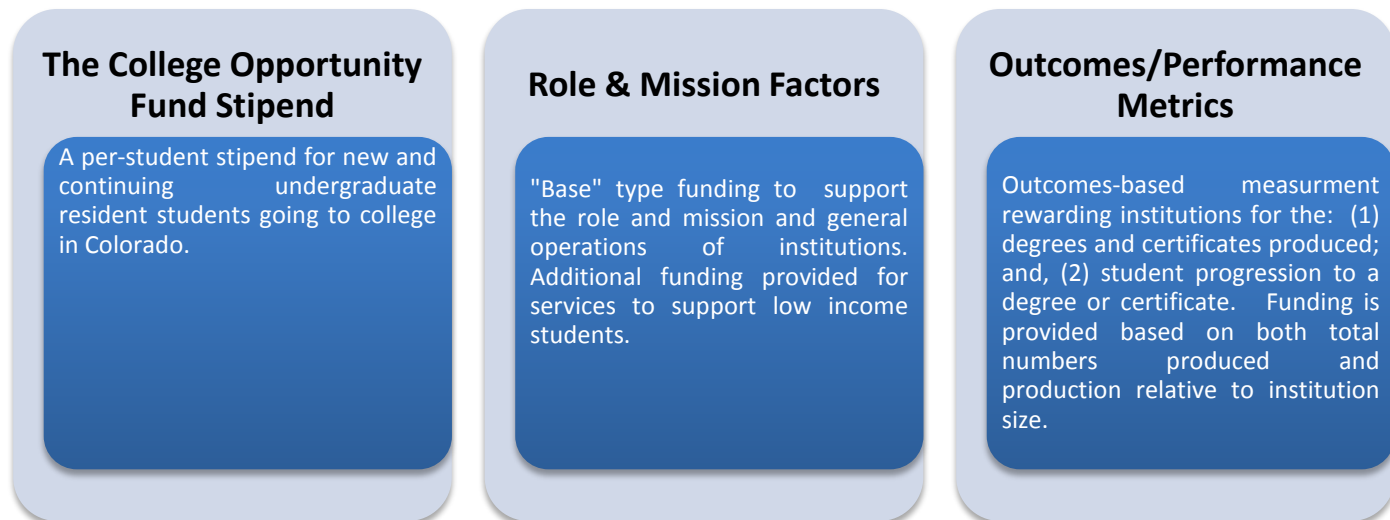
The report summarizes the higher education funding allocation model framework, changes and finalized components.

This report provides the higher education funding allocation model and includes:

- Overview of the Higher Education Funding Allocation Formula/Model
- Model review process
- Model component weights and definitions
- FY 2016-17 Model
- Response to Joint Budget Committee Requests for Information

Overview of the Higher Education Funding Allocation Model

As required by HB 14-1319, the higher education funding allocation Model consists of three sections:



Within each section there are individual components based on the statutory requirements in H.B. 14-1319:

Role & Mission:

- **Mission Differentiation** - This factor provides funding to offset programmatic costs and support for each institution's unique role and incorporates all factors outlined in the Role & Mission section of HB 14-1319.
- **Support Services for Pell-eligible Students** - Provides additional resources to institutions for meeting the needs of and providing services to low income students. The calculation is based on a percentage of the COF Stipend and the number of resident students meeting the criteria.

Outcomes/Performance:

- **Completion & Retention** - This metric rewards an institution's performance based on the number of students who transfer from a two-year to a four-year institution after completing at least 18 credit hours; number of certificates/degrees conferred; and number of students who make academic progress of 25%, 50%, and 75% in the relative two-year or four-year program.

Institutional Productivity - This metric rewards an institution's performance in relation to their size compared to the other state governing board institutions in Colorado. This addresses concerns about small institutions' inability to compete for performance dollars and recognizes rates of productivity.

Important Statutory Requirements for Appropriations

Pursuant to section 23-18-303, Specialty Education Programs, Area Vocational Schools and Local District Junior Colleges (also excludes student financial aid and capital funds) do not

receive their allocations through the model. Funding for these programs must be equal to the preceding year, plus-or-minus the same change in the Total State Appropriation.

Total State Appropriation (TSA)

Total state appropriation means, for a state fiscal year, the sum of the total amount appropriated to the governing boards of the state institutions of higher education for fee-for-service contracts determined pursuant to section 23-18-303, C.R.S and the amount of the appropriation to the college opportunity fund established in section 23-18-202, C.R.S. for student stipends. *Section 23-18-302 (10), C.R.S.*

Appropriations for Specialty Education Programs (SEP), Area Vocational Schools (AVS) and Local District Junior Colleges (LDJC)

Funding must be equal to such contract for the preceding year, plus-or-minus the same change in the *total state appropriation* and allows for a funding increase for these programs in excess of the percentage increase in the *total state appropriation*, or a decrease less than percentage decrease in the *total state appropriation*. *Section 23-18-304, C.R.S.*

Review Process and Changes to the Higher Education Funding Allocation Model

Following the implementation of the new allocation model for FY 2015-16, the Department, governing boards and C CHE recognized refinements were needed. As part of the review process, the Department utilized an inclusive and collaborative process to discuss the development and implementation of any needed modifications. This has included the formation of a Funding Allocation Model Review Team (FAMRT), which is comprised of representatives from each governing board and OSPB. Since April, this team spent countless hours working to improve the model. The overarching goals of the review process were to simplify and reduce the volatility of the model, as well as to ensure the model could work under various budget scenarios, such as funding reductions.

Additionally, the Joint Budget Committee provided seven Requests for Information (RFI) related to the funding allocation model. A majority of these RFIs focused on the complexity and lack of intuitiveness of Version 1.0 of the model. The issues raised in the RFIs were also conveyed by the JBC members during a Department update to the Committee on June 19, 2015.

The first phase of the work involved bringing the model in house to the department from the vendor, National Center for Higher Education Management Systems, and conducting a thorough technical review of every aspect of the model. The Department identified and made technical corrections, which were vetted through the Funding Allocation Model Review Team (FAMRT).

Through the second phase of work, the Department and review team addressed needed structural changes to the allocation model. After analysis and input from with the review team, Department staff and Funding Allocation Model Review Team concluded two areas needed refinements to make the model simpler and less volatile:

- The Tuition Stability Factor (Role & Mission) and its role in creating a less volatile representation of Role & Mission; and
- The influence and mechanics of the Volume Adjusted Awards (Performance), which created issues regarding the intuitiveness of model.

Changes to Role & Mission

In the 2015-16 allocation model, Role & Mission was based on three factors:

- Weighted Student Credit Hours;
- Pell as Percentage of the College Opportunity Fund Stipend; and
- The Tuition Stability Factor.

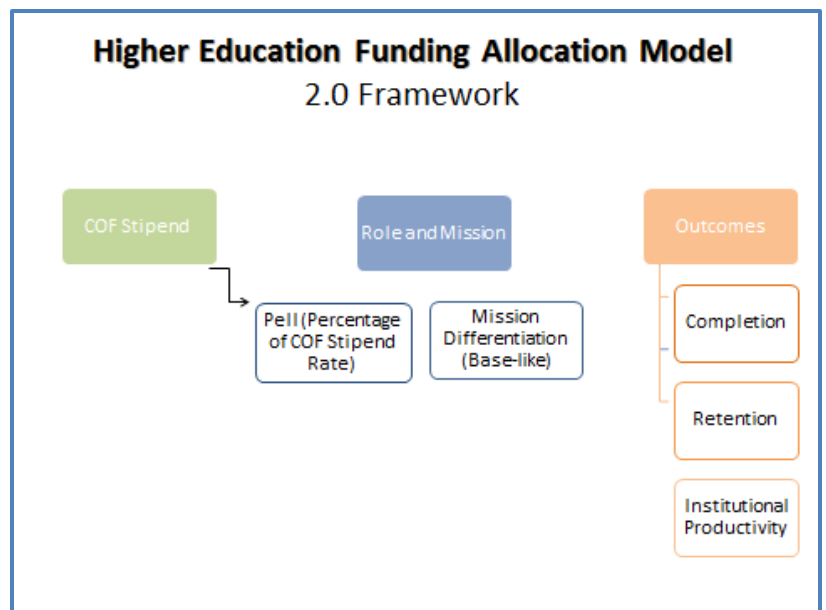
In particular, the Tuition Stability Factor was identified as area for immediate improvement. After conducting further analysis, it was also determined that the Weighted Student Credit Hour created additional volatility, as it was primarily driven by changes in production at institutions in an already production heavy model. The review team concluded that Role and Mission funding should provide a counterbalance to the enrollment/volume driven nature of the College Opportunity Fund (COF) stipend and the statutorily required counts of awards conferred on the Performance side of the model.

Solution

Change the nature of Role and Mission funding: Capture the role and mission of each governing board (i.e., size, location, selectivity, cost of programs) by eliminating weighted student credit hours and the tuition stability factor and replacing these with a factor that captures “mission differentiation,” which is based on the outputs from the fiscal year (FY) 2015-16 funding allocation model along with institution type and size.

Modifications to Outcomes/Performance

Within the Outcomes/Performance component, the influence of the “Volume Adjusted Awards” metric hurt the intuitiveness of the first version of the model. However, without this metric, the entire outcome/performance component of the model would be driven by counts, making it difficult for smaller institutions, such as the high performing Colorado School of Mines, to earn performance funding.



Solution

Capping the Volume Adjusted Awards Metric and renaming it Institutional Productivity: By placing a monetary cap on this metric, any new additional dollars flow directly to the Completion and Retention Metric. Capping the amount of funding flowing through the Institutional Productivity balances the importance of increasing award attainment (counts) and the efficiency of increasing award attainment (awards per FTE student).

Funding Allocation Model Definitions and Weights

College Opportunity Fund Stipend

Student stipends are authorized under the College Opportunity Fund Program (23-18-201, et.seq.); and must be at least 52.5 percent of “total state appropriation” Section 23-18-305 (2) (a), C.R.S.

College Opportunity Fund (COF) Stipend		
Measurement in HB 14-1319 Model	Stipend Rate	% of TSA
Based on FY 2014-15 COF actuals.	\$75	54.7%

Role & Mission

The Performance metrics reward institutions for the number of credentials awarded and students transferred [23-18-303(4)(a), C.R.S.]; as well as academic progress/retention [23-18-303(4)(b), C.R.S.]. These metrics are based on the count of credentials awarded and transferred by a governing board and the student counts of those who are reaching these thresholds at each institution in a given academic year. In addition, the CCHE Funding Allocation Model includes an additional metric pursuant to 23-18-303 (4)(c), C.R.S. that rewards performance in a manner which recognizes institutional performance in relation to their size and capacity.

As required in statute, the model includes specific weights for different academic award levels and identifies STEM and health care as “high priority” programs that receive a higher weight. Additional bonuses are provided for completions awarded to and transfers of Pell-eligible students (required by statute).

Role & Mission Factor Definitions and Data Sources		
Factor	Definition	Date Source/Year
Mission Differentiation	Based on the outputs from the FY 2015-16 funding allocation model and institution type and size that represents mission differentiation for each governing board (i.e., size, location, selectivity, cost of programs). This base type figure is a one-time calculation.	Outcomes of FY 2015-16 Allocation Model
Support Services for Pell-eligible Students	Credit hours for resident undergraduate Pell eligible students summed by institution. Use Pell-eligible credit hours as a percent of the College Opportunity Fund (COF) stipend (must never be less than 10 percent of COF).	Student Unit Record Data System (SURDS)/ Academic Year

	(AY) 2014-15
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More on Mission Differentiation

The Mission Differentiation factor is calculated using the FY 2015-16 funding model allocation output for Role and Mission and Performance multiplied by the institution’s tier percentage which is based on the type of institution and number of full time equivalent students it serves (Chart A Supplemental). For example, Adams State University is in tier C5 (Comp 4 year with under 2,500 SFTE). The tier percentage of 75 percent is multiplied by the allocation of \$11,106,275 to determine their Mission Differentiation amount of \$8,329,706.

To account for the different types of institutions within a governing board, the percentage of SFTE for each institution is calculated as a percentage of the governing board total SFTE. For example, the Colorado State University governing board is comprised of CSU-Fort Collins which enrolls 85.9% of their students and CSU-Pueblo enrolls 14.1% for a total of a 100 percent. The SFTE percentage is multiplied by the governing board’s model outcomes to create an individual dollar amount for each institution (Chart A, Column G) to then be multiplied by the tier percentage, which generates their Mission Differentiation amount.

Mission Differentiation by Institution								
A	B	C	D	E	F	G	H	I
Type	Institution	Tier	FY 2015 SFTE	SFTE Percentage of Governing Board Total	15-16 Model Outcomes by Governing Board	15-16 model Outcomes * % SFTE (E*F)	Tier Percentage (See Supplemental Chart)	Mission Differentiation (G*H)
Research								
	CSU Ft. Collins	R2	23,135	85.9%	\$36,830,679	31,624,026	50%	15,812,013
	CU-Boulder	R1	26,712	57.8%	\$60,884,140	35,188,393	45%	15,834,777
	UNC	R3	8,954	100.0%	\$23,915,186	23,915,186	68%	16,142,751
	Mines	R3	5,529	100.0%	\$14,255,738	14,255,738	68%	9,622,623
Comp 4 Year								
	Adams	C5	2,325	100.0%	\$11,106,275	11,106,275	75%	8,329,706
	CU-Denver	C2	10,445	22.6%	\$60,884,140	13,759,463	50%	6,879,731
	CU-Co Spr	C3	9,061	19.6%	\$60,884,140	11,936,284	60%	7,161,771
	CSU - Pueblo	C4	3,809	14.1%	\$36,830,679	5,206,653	68%	3,514,491
	Ft. Lewis	C4	3,543	100.0%	\$7,276,606	7,276,606	68%	4,911,709
	Mesa	C3	7,399	100.0%	\$9,855,958	9,855,958	60%	5,913,575
	Metro	C1	16,111	100.0%	\$18,540,331	18,540,331	45%	8,343,149
	Western	C5	1,991	100.0%	\$8,871,375	8,871,375	75%	6,653,531
2 Year								
	CCCS Large Urban	A	21,436	40.4%	\$44,055,048	17,813,483	45%	8,016,068

	CCCS Med Urban	B	25,267	47.7%	\$44,055,048	20,997,074	60%	12,598,245
	CCCS Small Rural	C	6,311	11.9%	\$44,055,048	5,244,490	65%	3,408,919

Mission Differentiation Supplemental Chart		
Mission Differentiation Tiers		
Tier	FTE Range	Tier Percentage
Research		
R1	25,000+	45%
R2	15,000 to 25,000	50%
R3	Under 15,000	68%
Comp 4-year		
C1	15,000+	45%
C2	10,000 to 15,000	50%
C3	5,000 to 10,000	60%
C4	2,500 to 5,000	68%
C5	Under 2,500	75%
2-year		
A	7,500 +	45%
B	1,500 to 7,500	60%
C	< 1,500	65%

Role & Mission Factor Weights	
Factor	Weight
Mission Differentiation	N/A (flat dollar amount).
Pell-eligible	10% of the COF Stipend

Outcomes/Performance

The Performance metrics reward institutions for the number of credentials awarded and students transferred [23-18-303(4)(a), C.R.S.]; as well as academic progress/retention [23-18-303(4)(b), C.R.S.]. These metrics are based on the student counts at each institution who are reaching these thresholds. In addition, FY 2016-17 funding allocation model includes an additional metric pursuant to 23-18-303 (4)(c), C.R.S. that rewards performance in a manner that recognizes institutional performance in relation to their size and capacity.

As required in statute, the model includes specific weights related to the academic award level and identifies STEM and health care as “high priority” subjects that receive a higher weight. Additional bonuses are provided for completions awarded to and transfers of Pell-eligible (required by statute).

Completion and Transfer weights are as follows:

Outcomes/Performance Metric Definitions and Data Sources		
Metric	Definition	Data Source/ Year
Completion	<p>The number of certificates or degrees awarded an institution and the number of students who transfer from a community college to another institution after the completion of a minimum of 18 credit hours. The amount to be awarded for each certificate or degree is based on the subject and level of the credential.</p> <p>Certificates will be counted when issued for:</p> <ul style="list-style-type: none"> • Programs spanning one year (24 credit hours) or more; or • Programs less than one year (24 credit hours) and meeting the federal “gainful employment” definition, or representing the highest award earned at stop-out. When multiple certificates of less than one year are earned by a student then only one is counted. <p>Students earning multiple certificates in an academic year will have each earned certificate count as a separate outcome. A community college that receives an incentive for a transfer student cannot also receive a retention bonus for that student in the same year.</p> <p>The value shall be increased for each credential earned by or transfer of a Pell-eligible undergraduate student.</p>	Student Unit Record Data System (SURDS)/ AY 2014-15
Retention	<p>The number of students who make the following steps of academic progress:</p> <p>Four-year institutions -number of students who cross the threshold of completing:</p> <ul style="list-style-type: none"> • 30 credit hours • 60 credit hours • 90 credit hours <p>Two-year institutions - number of students who cross the threshold of completing:</p> <ul style="list-style-type: none"> • 15 credit hours • 30 credit hours • 45 credit hours <p>Concurrent enrollment will be included and each student will be counted only once at each academic progress interval. Students crossing multiple progress intervals are counted in the highest interval.</p>	Student Unit Record Data System (SURDS)/ AY 2014-15

Outcomes/Performance Metric Definitions and Data Sources		
Metric	Definition	Data Source/Year
Institutional Productivity	Calculated by: <ol style="list-style-type: none"> 1. Dividing an institutions total weighted degree total by Student Full-time Equivalent (SFTE) = "Awards per FTE" 2. Indexing individual institutions' "Awards per FTE" to the state average "Awards per FTE" 3. Multiply "indexed awards per FTE" by total "awards per FTE" funding to get allocation by institution for this metrics 	Student Unit Record Data System (SURDS)/ AY 2014-15 Budget Data Book

Outcomes/Performance Metric Weights

Completion and Transfer Weights	
Credential Level	Weight
Transfer	.25
Certificates	0.25
Associates	0.50
Bachelors	1.00
Graduate Certificate	0.25
Masters	1.25
Specialists	1.25
Doctoral	1.25

Additional Undergraduate Completion/Transfer Bonus for Priority Populations	
Type	Additional Bonus
Pell-Eligible	1.6
STEM and Heath	1.5

Retention Weights (completed credit hours)	
Credit Hours Accumulated	CCHE Adopted Model Weight
15/30	.25
30/60	.50
45/90	.75

After the points have been calculated for the completion and retention metrics, weights are then uniformly applied to the counts for each institution.

Completion and Retention Metric Weights

Completion	85%
Retention	15%

Institutional Productivity

This metric functions as a “carve out” off the top of the amount allocated to the Performance component of the model and is capped at \$10 million.

FY 2016-17 Higher Education Funding Allocation Model

Budget Overview *(Does not represent actual allocations as numbers may vary due to rounding)*



COLORADO
Department of
Higher Education

Funding Allocation Model (Draft)

Fiscal Year 2016-17

FUNDING ALLOCATIONS

Total Appropriations for Higher Education

Full Appropriations for Higher Education	\$652,847,185
Specialty Education Programs Amount	\$112,957,776
Local District Junior College Amount	\$15,768,520
Area Vocational Schools Amount	\$9,675,895
New Total State Appropriations for Model (TSA)	\$514,444,994

Budget Percentage Increase

-2.966501%

SEP Additional Increase

0.00%

COF Stipend

Total Awarded from COF Stipend

\$281,646,532

COF Stipend per Credit Hour

573

Percent of Appropriation Dedicated to COF Stipend

54.7%

COF Stipend must be 52.5% or greater.

Role & Mission and Performance Allocations

Total in Role and Mission Allocation	\$139,773,421
Total: Performance	\$93,025,041

Role and Mission Split Percentage

60%

Performance Split Percentage

40%

**Note: Input dollar amounts are rounded to the nearest whole dollar, and may differ slightly from Total State Appropriations due to rounding.

Role & Mission (Does not represent actual allocations as numbers may vary due to rounding)



COLORADO
Department of
Higher Education

Funding Allocation Model (Draft)

Fiscal Year 2016-17

User: Emma Beck

Pell Percentage Weight
10.0%

ROLE AND MISSION

Role & Mission Final Output

Governing Board	Dollars Awarded to Pell	Mission Differentiation	Total Awards from Role and Mission
Adams State University	\$175,817	8,079,815	\$8,255,632
CCCS	\$4,325,730	23,302,534	\$27,628,264
Colorado Mesa University	\$571,451	5,736,168	\$6,307,619
Colorado School of Mines	\$145,390	9,333,944	\$9,479,335
CSU System	\$1,187,192	18,746,709	\$19,933,900
CU System	\$1,994,776	28,979,890	\$30,974,767
Fort Lewis College	\$130,962	4,764,358	\$4,895,320
Metropolitan State University of Denver	\$1,435,034	8,092,854	\$9,527,888
University of Northern Colorado	\$557,340	15,658,468	\$16,215,808
Western State Colorado University	\$100,963	6,453,925	\$6,554,888
Grand Total	\$10,624,656	129,148,766	\$139,773,421



Outcomes/Performance (Does not represent actual allocations as numbers may vary due to rounding)



COLORADO
Department of
Higher Education

Funding Allocation Model (Draft)

Fiscal Year 2016-17

PERFORMANCE

Transfer Weight

Certificate Weighting

Associate Weight

Baccalaureate Weight

Grad. Certificate Weight

Master Weight

Specialist Weight

Doctorate Weight

Governing Board	Completions, Retention, and Transfer along Table (Down)	Institutional Productivity	Total Awards from Performance
Adams State University	\$1,664,939	\$1,113,561	\$2,778,499
CCCS	\$16,475,599	\$716,497	\$17,192,096
CSU System	\$15,310,297	\$1,058,650	\$16,368,947
CU System	\$27,062,622	\$1,064,314	\$28,126,936
Colorado Mesa University	\$3,084,714	\$920,567	\$4,005,281
Colorado School of Mines	\$3,557,972	\$1,090,841	\$4,648,813
Fort Lewis College	\$1,475,635	\$951,281	\$2,426,916
Metropolitan State University of Denver	\$7,762,989	\$1,007,324	\$8,770,313
University of Northern Colorado	\$5,713,238	\$1,087,217	\$6,800,455
Western State Colorado University	\$915,483	\$989,750	\$1,905,234

Volume Adjustment Factors

SFTE Carveout

Completion & Retention

Total: Performance

Total of Indexed Weighted Awards

Enter Total of Indexed Weighted Awards

Completion Weight

Retention Weight

URM Bonus

Pell Bonus

Priority Bonus

Final Output (Does not represent actual allocations as numbers may vary due to rounding)



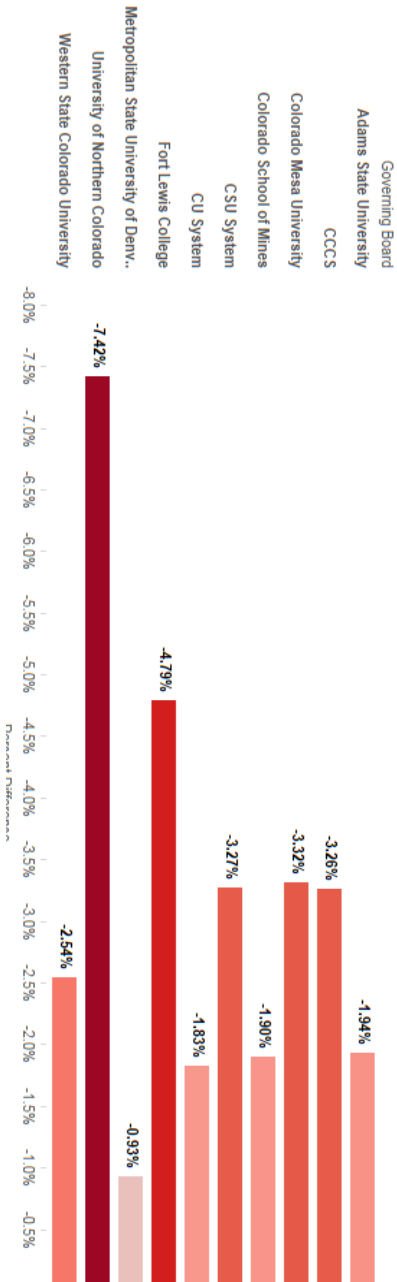
COLORADO
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Funding Allocation Model (Draft)

Fiscal Year 2016-17

FUNDING BY GOVERNING BOARD

Governing Board	Total Awarded from COF Stipend	Total Awards from Role and Mission	Total Awards from Performance	Final Allocation Before Guardrails	Percentage Change - No SEP	Final Allocation with SEP Included	Percentage Change with SEP	Final Guardrail Allocation	Final Guardrail Percentage Change
Adams State University	\$2,813,542	\$8,255,632	\$2,778,499	\$13,847,673	-1.94%	\$13,847,673	-1.94%	\$13,847,673	-1.94%
CCCS	\$103,633,986	\$27,628,264	\$17,192,096	\$148,454,346	-3.26%	\$148,454,346	-3.26%	\$148,454,346	-3.26%
CSU System	\$41,899,776	\$19,933,900	\$16,368,947	\$78,202,623	-3.27%	\$130,420,510	-3.15%	\$78,202,623	-3.27%
CU System	\$60,689,806	\$30,974,767	\$28,126,936	\$119,791,509	-1.83%	\$180,531,398	-2.21%	\$119,791,509	-1.83%
Colorado Mesa University	\$13,340,658	\$6,307,619	\$4,005,281	\$23,653,558	-3.32%	\$23,653,558	-3.32%	\$23,653,558	-3.32%
Colorado School of Mines	\$6,029,345	\$9,479,335	\$4,648,813	\$20,157,493	-1.90%	\$20,157,493	-1.90%	\$20,157,493	-1.90%
Fort Lewis College	\$3,933,335	\$4,895,320	\$2,426,916	\$11,255,571	-4.79%	\$11,255,571	-4.79%	\$11,255,571	-4.79%
Metropolitan State University of Denver	\$31,388,814	\$9,527,888	\$8,770,313	\$49,687,015	-0.93%	\$49,687,015	-0.93%	\$49,687,015	-0.93%
University of Northern Colorado	\$15,029,121	\$16,215,808	\$6,800,455	\$38,045,384	-7.42%	\$38,045,384	-7.42%	\$38,045,384	-7.42%
Western State Colorado University	\$2,888,149	\$6,554,888	\$1,905,234	\$11,348,271	-2.54%	\$11,348,271	-2.54%	\$11,348,271	-2.54%



Response to Joint Budget Committee Requests for Information

DHE 25 (related to the HB 14-1319 Funding Allocation Model)

Department of Higher Education, Colorado Commission on Higher Education, Administration - The Joint Budget Committee requests that during the annual review process of the new funding allocation model the Department consider the following policy issues, include with their annual budget request, due November 1, 2015, a report on how these issues were examined, incorporated into the current model, or otherwise decided upon, and make recommendations for changes to the model, if needed, including identifying any needed funding to implement.

- a) **Examine the role of the “Tuition Stability Factor” within the model and how it should be utilized in the future.**

The 2016-17 model no longer includes the Tuition Stability Factor.

In the 2015-16 model, the Tuition Stability Factor was used to balance the funding formula and to ensure that institutions could continue to comply with the College Affordability Act, which included a 6 percent tuition cap on resident tuition. However, as noted by the Department this factor needed to be refined and/or eliminated. During the review process, it was determined that a “base” type figure was the appropriate approach to the Role & Mission portion of the model. The resulting change was the elimination of the Tuition Stability Factor and the Weighted Student Credit Hour Factor. These factors were replaced by the Mission Differentiation Factor, which represents the role and mission of each institution (i.e., size, location, selectivity, cost of programs) and is based on the outputs from the FY 2015-16 funding allocation model, as well as institution type and size. The utilization of this factor simplifies the model and reduces volatility.

- b) **Examine the feasibility, cost, and benefit to weighting resident and non-resident students within the model.**

H.B. 14-1319 makes no distinction on the treatment of non-resident students. During the 2015-16 allocation model development process, the question was raised to stakeholders about the types of students to be included within the factors and metrics of the model - should the model count all students or resident students only? The legislation was intentionally silent on this issue, purposefully leaving it to the project process to address.

A robust discussion took place over several Funding Allocation Model Expert Team and Executive Advisory Group meetings before a final recommendation was developed and forwarded to CCHHE for action. In these discussions a number of important policy issues were vetted - public perception; recognizing overall institutional performance; understanding the inability to separate programmatic

costs associated with resident and non-resident; and, providing incentives to achieve statewide performance goals.

The Colorado Commission on Higher Education's Master Plan - [Colorado Competes, A Completion Agenda for Higher Education](#) - focuses on the achievements of all students in Colorado. In addition, the legislation itself calls for recognizing the total number of students performing under "transfers", "retention", and "completions".

Further, after reviewing prior fee-for-service contracts there has not been a distinction between services provided to residents versus services provided to non-residents under the previous funding allocation process. On campuses, services are made available to all students and are not segregated by student residency status; and, classrooms have both residents and non-residents in courses studying alongside one another.

- c) Examine the feasibility, cost, and benefit to program the ability to download model settings and funding results into an Excel spreadsheet format for any given "run" of the model; allowing users to compare the impact of various model settings without excessive data entry.
- d) (i) Ensure the ability for all concerned parties to examine data used by the model; and (ii) examine the feasibility, cost, and benefit to program a mechanism into the model that would allow for consideration of how model results would change with different underlying data, e.g., data from prior years.

In response to c and d, the Department created an Excel-based version of the funding allocation model. This tool provides additional access to the formulas, data tables and the order of operations used in each section of the model. Additionally, this tool allows users to develop and compare "model scenarios" without excessive data entry.

The development of this tool and bringing the model "in house" from the National Center for Higher Education Management Systems, the Department has been able to provide full access to underlying data to the governing boards.

In tandem, the Excel and Tableau versions of the model allow users of all knowledge levels to access the higher education allocation funding model in an understandable and transparent manner.

- e) Examine the feasibility, cost, and benefit to program a mechanism to run the model so that an adjustment to any particular model setting or value does not change the funding allocation associated with other model components but instead increases or decreases the total model funding - thus enabling an increase or decrease support for services (such as Pell-eligible students or

masters degrees awarded) without simultaneously reducing funding to other model components.

The changes to the funding allocation model for 2016-17 and the creation of the Excel-based version of the model allow for an adjustment to be made to isolated parts of the model without affecting the other model components. For example, it is now possible to change the funding for Pell-eligible students without affecting the other various factors and metrics in the model.

Because of these changes, policy makers now have a far more powerful tool for supporting increased postsecondary student attainment and flexibility to make adjustments in order to meet evolving state-wide goals.

- f) Continue to examine how performance funding is awarded to incentivize increased completions, retentions, and transfers. In particular:
- I. Explore why increasing the proportion of funding directed to performance in the FY 2015-16 model reduces funding to the state's more selective institutions. Does this indicate a need for further changes to the model?
 - II. Explore how changes in the numbers of degrees awarded at small versus large governing boards could affect performance funding for each, given FY 2015-16 model settings and recent trends in degrees awarded at boards of different sizes.

Within the Outcomes/Performance component, the influence of the metric called "Volume Adjusted Awards" hurt the intuitiveness of the first version of the model. However, without this metric, the entire outcome/performance component of the model would have been driven by counts.

In order to make the model more intuitive and take into consideration institutional size so that all governing boards could compete within the outcomes/performance component, the 2016-17 funding allocation model caps Institutional Productivity (formerly called Volume Adjusted Awards Metric) at \$10 million. This change results in any funding added to performance to flow through the Completion/Retention counts based metric.

In combination with the addition of the Mission Differentiation factor, the Performance portion of the model is now more intuitive and clearly demonstrates the importance of increasing the number of credentials to final allocations to Governing Boards. Also, the change allows for smaller governing boards and more selective institutions the opportunity to compete for Outcomes/Performance funding.

- g) Examine the feasibility, cost, and benefit to incorporating total institutional revenue within the model.

Through the development of the Mission Differentiation Factor the Department explored several options of incorporating total revenues within the model. However, the Funding Model Review Team expressed concern with this type of approach and felt greater study is required. Additionally, given that the Department and Governing Boards have been working to develop new tuition policies, incorporating total institutional revenues should be discussed after the finalization of the new tuition policies.