



Four-Year Institutions

Student-Focused Funding

for West Virginia Public Higher Education



Presented to the Joint Standing Committee on Education
and the Legislative Oversight Commission on Education Accountability

September 17, 2018

RECENT REVISIONS TO THE PROPOSAL

The Student-Focused Funding Model proposal was last presented to the West Virginia Higher Education Policy Commission at its August 24, 2018 meeting. Following that meeting, the model was further modified to exclude West Virginia University's land grant match of \$8,104,568 from the institution's base budget value. All model estimates were updated to reflect this change. It should be noted that this is the only exclusion that is not listed in the budget bill as a separate and distinct line item. The dollar amount for the land grant match was provided to Commission staff by West Virginia University.



Senator Mitch Carmichael
Senate President
and Lieutenant Governor



Delegate Roger Hanshaw
Speaker of the House



Senator Kenny Mann
Chair, Senate Committee on
Education



Delegate Paul Espinosa
Chair, House Committee
on Education



Senator Charles S. Trump IV
Chair, Senate Committee on the
Judiciary

LEGISLATIVE MANDATE

West Virginia Code §18B-1B-4(d)

The Higher Education Policy Commission shall **examine the question of general revenue appropriations** to individual higher education institutions per student, and per credit hour, and by other relevant measures at all higher education institutions, including four-year baccalaureate institutions and the community and technical colleges, and on or before January 1, 2018, the Commission shall deliver its report to the Joint Committee on Government and Finance and the Legislative Oversight Commission on Education Accountability.

This report shall include a recommendation to the Legislature on a formula for the allocation of general revenue to be appropriated to such institutions that provides for ratable funding across all four-year institutions and community and technical colleges on a ratable basis, by enrolled student, by credit hour or by other relevant measures. On such basis, the Commission shall make a recommendation to the Legislature as to the amounts that each such institution should have appropriated to it in the general revenue budget for fiscal year 2019, based upon the total general revenue appropriations that such institutions receive in aggregate in the enacted budget for fiscal year 2018.



A NEW FORMULA MUST...

- focus **state taxpayer dollars** on educating West Virginia **resident** students;
- provide the Higher Education Policy Commission and West Virginia Council for Community and Technical College Education with a **fair and equitable** means of calculating **recommended institutional funding levels**;
- account for **variations in the missions** of the state's public institutions and the unique needs of their **diverse student populations**;
- be based upon **reliable metrics** drawn from **existing data resources**;
- be **straightforward** and **easy to understand**;
- be **transparent** and **auditable**;
- promote **innovation** and **student success**; and
- **reward** institutional successes with additional funding.

ESTIMATED PER-FTE FUNDING LEVELS

	FY18 Base Budget	2016-17 Annualized FTE Enrollment		Base Appropriation per FTE	
		All Students	WV Residents	All Students	WV Residents
Four-Year Institutions	\$229,434,536	58,867	36,461	\$3,898	\$6,293
Bluefield State College	\$5,379,199	1,203	1,028	\$4,471	\$5,233
Concord University	\$8,278,077	2,217	1,842	\$3,734	\$4,494
Fairmont State University	\$14,579,417	3,639	3,171	\$4,006	\$4,598
Glenville State College	\$5,622,099	1,217	998	\$4,620	\$5,633
Marshall University*	\$54,940,572	12,125	8,864	\$4,531	\$6,198
Potomac State College of WVU	\$3,650,589	1,130	802	\$3,231	\$4,552
Shepherd University	\$9,360,954	3,163	2,039	\$2,960	\$4,591
West Liberty University	\$7,592,683	2,226	1,450	\$3,411	\$5,236
West Virginia State University**	\$9,514,960	2,252	1,938	\$4,225	\$4,910
West Virginia University***	\$103,079,979	28,579	13,507	\$3,607	\$7,632
WVU Institute of Technology	\$7,436,007	1,116	822	\$6,663	\$9,046

*In addition to its base budget of \$54,940,572, Marshall University received **\$3,443,152** in special-purpose funding. These appropriations are not included in base budget values above: Luke Lee Lab (\$93,441), Vista (\$229,019), Brownfield PD (\$309,606), MUGC Writing Project (\$25,412), WV Autism Training Center (\$1,671,280), Lottery Funds - Rural Health Initiative and Rural Health Residency Program (\$560,107), Forensic Lab (\$235,104), Rural Health Outreach Program (\$163,219) and Center for Rural Health (\$155,964).

** West Virginia State University's land grant match of **\$1,584,947** is not included in FY18 base budget figures.

*** In addition to its base appropriation of **\$103,079,979**, West Virginia University received \$28,154,323 in special-purpose funding. The following appropriations are not included in the base budget values above: Jackson's Mill (\$472,960); Brownfield PD (\$314,188); Rural Health Outreach Program (\$158,372); Soft Drink Tax Appropriation (\$15,935,640); Land Grant Match (\$7,871,000); Medical School Lottery Funds (\$3,402,163).

ORIGINAL PROPOSAL

The original version of the Student-Focused Funding Model proposal distributed general appropriation funds to public four-year institutions based upon the courses attempted by West Virginia resident students [ACCESS], the progress resident students make toward on-time degree completion [SUCCESS], and the number of students who finish college with high-quality degrees [IMPACT].

The full version of the original proposal is available online at <http://www.wvhepc.edu/resources/reports-and-publications/>

ACCESS

70% of total funding

Weighted Credit-Hour Production

Credit hours attempted by *West Virginia residents*, weighted by academic discipline, course level and high-risk student status.

SUCCESS

5% of total funding

Momentum / Progress to Degree

Number of undergraduate *West Virginia resident* students who are on track for **on-time degree completion**, with additional credit awarded for students in high-risk populations.

IMPACT

25% of total funding

High-Quality Degree Production

Number of degrees completed by *West Virginia residents*, with additional credit awarded for degrees produced in high-demand fields and those earned by students in high-risk populations. Institutions are also rewarded for non-resident graduates who join West Virginia's workforce after graduation.

TOTAL FUNDING – ORIGINAL PROPOSAL

The full version of the original proposal is available online at <http://www.wvhepc.edu/resources/reports-and-publications/>

	FY18 Base Budget*	New Base Budget (Proposed Model)	Difference from FY 2018 Base Budget	Hold-Harmless Provision Dollars	New Base Budget with Hold-Harmless (Proposed Model)	Difference from FY 2018 Base Budget	Percent Difference
Four-Year Institutions	\$229,434,536	\$229,434,536	\$0	\$13,472,506	\$242,907,042	\$13,472,506	5.9%
Bluefield State College	\$5,379,199	\$6,062,121	\$682,922	\$0	\$6,062,121	\$682,922	12.7%
Concord University	\$8,278,077	\$10,473,961	\$2,195,884	\$0	\$10,473,961	\$2,195,884	26.5%
Fairmont State University	\$14,579,417	\$17,734,276	\$3,154,859	\$0	\$17,734,276	\$3,154,859	21.6%
Glenville State College	\$5,622,099	\$4,645,504	(\$976,595)	\$976,595	\$5,622,099	\$0	0.0%
Marshall University*	\$54,940,572	\$56,389,894	\$1,449,322	\$0	\$56,389,894	\$1,449,322	2.6%
Potomac State College of WVU	\$3,650,589	\$4,012,521	\$361,932	\$0	\$4,012,521	\$361,932	9.9%
Shepherd University	\$9,360,954	\$12,765,130	\$3,404,176	\$0	\$12,765,130	\$3,404,176	36.4%
West Liberty University	\$7,592,683	\$9,236,448	\$1,643,765	\$0	\$9,236,448	\$1,643,765	21.6%
West Virginia State University*	\$9,514,960	\$10,094,607	\$579,647	\$0	\$10,094,607	\$579,647	6.1%
West Virginia University*	\$103,079,979	\$93,869,132	(\$9,210,847)	\$9,210,847	\$103,079,979	\$0	0.0%
WVU Institute of Technology	\$7,436,007	\$4,150,943	(\$3,285,064)	\$3,285,064	\$7,436,007	\$0	0.0%

*In addition to its base budget of \$54,940,572, Marshall University received **\$3,443,152** in special-purpose funding. These appropriations are not included in base budget values above: Luke Lee Lab (\$93,441), Vista (\$229,019), Brownfield PD (\$309,606), MUGC Writing Project (\$25,412), WV Autism Training Center (\$1,671,280), Lottery Funds - Rural Health Initiative and Rural Health Residency Program (\$560,107), Forensic Lab (\$235,104), Rural Health Outreach Program (\$163,219) and Center for Rural Health (\$155,964).

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MODIFICATIONS TO THE PROPOSAL

Resulting from Feedback Received During the Comment Period

Concern or Recommendation

Because of significant variations in the missions of the state's three publicly-funded medical schools, **medical school funding should be exempted** from the model.

The ACCESS pool should place a greater emphasis on **credit-hour completion** (earned hours instead of attempted hours).

Undergraduate credit-hour production should be weighted the same across universities and colleges.

Credit hours attempted in **co-requisite math and English courses** should be weighted at the same rate as those for traditional developmental courses.

Changes to the Model

- All direct appropriations to the **schools of medicine are excluded**.
- Medical and dental students are not considered in model calculations.
- Credit-hour production is now calculated as the sum of **credit-hours attempted and credit-hours earned**.
- All credit-hour production values are now calculated using the **university weighting table for all institutions**.
- Basic Skills Cluster weights are now used for **all traditional developmental and co-requisite courses**.

WEIGHTING TABLE

Discipline Clusters	Lower Division	Upper Division	Masters	Doctoral
Liberal Arts, Math, Social Science, Languages, Other	1.0	2.2	4.4	5.5
05. Area, Ethnic, Cultural & Gender Studies	1.0	2.2	4.4	5.5
09. Communication, Journalism and related programs	1.0	2.2	4.4	5.5
16. Foreign Languages, Literature and Linguistics	1.0	2.2	4.4	5.5
19. Family and Consumer Sciences/Human Sciences	1.0	2.2	4.4	5.5
23. English Language & Literature/Letters	1.0	2.2	4.4	5.5
24. Liberal Arts & Sciences, General Studies and Humanities	1.0	2.2	4.4	5.5
25. Library Science	1.0	2.2	4.4	5.5
27. Mathematics & Statistics	1.0	2.2	4.4	5.5
28. Reserve Officer Training Corps	1.0	2.2	4.4	5.5
29. Military Technologies	1.0	2.2	4.4	5.5
30. Multi/Interdisciplinary Studies	1.0	2.2	4.4	5.5
38. Philosophy & Religious Studies	1.0	2.2	4.4	5.5
42. Psychology and Applied Psychology	1.0	2.2	4.4	5.5
45. Social Sciences	1.0	2.2	4.4	5.5
54. History	1.0	2.2	4.4	5.5
99. Honors Curriculum and Other	1.0	2.2	4.4	5.5
Basic Skills Cluster	1.5			
32. Basic Skills	1.5			
Business Cluster (Business, Public Administration)	1.0	2.2	4.4	6.6
44. Public Administration & Social Service Professions	1.0	2.2	4.4	6.6
52. Business Management, Marketing & related support services	1.0	2.2	4.4	6.6
Education Cluster	1.5	2.2	2.75	5.5
13. Education	1.5	2.2	2.75	5.5
Services Cluster (Personal, Protective, Recreation)	1.5	2.2	3.3	4.4
31. Parks, Recreation, Leisure & Fitness Studies	1.5	2.2	3.3	4.4
12. Personal & Culinary Services	1.5	2.2	3.3	4.4
43. Security and Protective Services	1.5	2.2	3.3	4.4
Visual and Performing Arts Cluster	1.5	2.75	5.5	6.6
50. Visual & Performing Arts	1.5	2.75	5.5	6.6
Trades/Tech Cluster (Construction, Mechanic Tech, Precision Productor)	2.0	2.75		
46. Construction Trades	2.0	2.75		
47. Mechanic Repair Technologies/Technicians	2.0	2.75		
48. Precision Production	2.0	2.75		
49. Transportation & Materials Moving	2.0	2.75		
Sciences Cluster (Agriculture, Computer, Biology, Physical)	2.0	3.3	5.5	8.8
01. Agricultural, Agriculture Operations & related sciences	2.0	3.3	5.5	8.8
03. Natural Resources & Conservation	2.0	3.3	5.5	8.8
11. Computer & Information Sciences & Support Services	2.0	3.3	5.5	8.8
26. Biological & Biomedical Sciences	2.0	3.3	5.5	8.8
40. Physical Sciences	2.0	3.3	5.5	8.8
Law Cluster	2.0	2.2	4.4	4.4
22. Legal Professions and Studies	2.0	2.2	4.4	4.4
Engineering/Architecture Cluster	2.0	3.3	5.5	8.8
04. Architecture	2.0	3.3	5.5	8.8
14. Engineering	2.0	3.3	5.5	8.8
15. Engineering Technologies/Technicians	2.0	3.3	5.5	8.8
Health Cluster	2.0	2.2	5.5	6.6
51. Nursing, Allied Health, Health Professions	2.0	2.2	5.5	6.6

Source: Nevada System of Higher Education



COREQUISITE COURSE WEIGHTING

Discipline Clusters	Lower Division
Liberal Arts, Math, Social Science, Languages, Other	1.0
05. Area, Ethnic, Cultural & Gender Studies	1.0
09. Communication, Journalism and related programs	1.0
16. Foreign Languages, Literature and Linguistics	1.0
19. Family and Consumer Sciences/Human Sciences	1.0
23. English Language & Literature/Letters	1.0
24. Liberal Arts & Sciences, General Studies and Humanities	1.0
25. Library Science	1.0
27. Mathematics & Statistics	1.0
28. Reserve Officer Training Corps	1.0
29. Military Technologies	1.0
30. Multi/Interdisciplinary Studies	1.0
38. Philosophy & Religious Studies	1.0
42. Psychology and Applied Psychology	1.0
45. Social Sciences	1.0
54. History	1.0
99. Honors Curriculum and Other	1.0
Basic Skills Cluster	1.5
32. Basic Skills	1.5

Source: Nevada System of Higher Education

MODIFICATIONS TO THE PROPOSAL

Resulting from **Feedback** Received During the Comment Period

Concern or Recommendation

The **proportions of the three funding pools** place too much emphasis on credit-hour production and not enough on student success and degree production.

The **scheduled phase-out of the hold-harmless provision** would likely result in **harmful budget reductions** to several institutions.

The **research institution weighting factors** applied to West Virginia University, Marshall University and WV State University are not proportional to actual institutional investments in research.

Changes to the Model

- Funding pool proportions were adjusted to place **additional weight on degree completion** (Impact pool). Credit-hours earned are now included in Access pool.
- The **hold-harmless period will be extended to 8 years** to provide long-term stability across the system and to allow time for changes in institutional behavior to be reflected in quantitative metrics. Further, a **permanent stop-loss provision** has been added to protect institutions against single-year budget reductions of greater than 3 percent or cumulative 3-year reductions of greater than 5 percent.
- The research institution weighting factor has been removed. A new **research funding pool** was added. Funds in the research pool are distributed proportionally based on each institution's **actual research expenditures** as reported in audited financial statements.

HOLD-HARMLESS AND STOP-LOSS PROVISIONS

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029 and Beyond
Hold-Harmless Provision Base appropriation levels will not fall below FY19 levels, adjusted annually for inflation, during the 8-year hold-harmless period.										
Permanent Stop-Loss Provision Institutional will never experience a single-year budget reduction greater than 3 percent or cumulative 3-year reduction greater than 5 percent.										

FUNDING POOLS – CURRENT PROPOSAL

The Student-Focused Funding Model provides an objective and equitable means of distributing general appropriation funds to public four-year institutions based upon the courses attempted by students [ACCESS], the progress students make toward on-time degree completion [SUCCESS], the number of students who finish college with high-quality degrees [IMPACT], and the amount of money institutions invest in research and development [RESEARCH].

ACCESS

55% of total funding

Weighted Credit-Hour Production

The sum of credit hours attempted and credit hours earned by *West Virginia residents*, weighted by academic discipline, course level and high-risk student status.

SUCCESS

5% of total funding

Momentum / Progress to Degree

Number of undergraduate *West Virginia resident* students who are on track for on-time degree completion, with additional credit awarded for students in high-risk populations.

IMPACT

35% of total funding

High-Quality Degree Production

Number of degrees completed by *West Virginia residents*, with additional credit awarded for degrees produced in high-demand fields and those earned by students in high-risk populations. Institutions are also rewarded for non-resident graduates who join West Virginia's workforce after graduation.

RESEARCH

5% of total funding

Investments in Research and Development

Actual dollars invested in research and development activity, as reported in annual audited financial statements.

MODIFICATIONS TO THE PROPOSAL

Resulting from Feedback Received During the Comment Period

Concern or Recommendation

Non-resident students were excluded from the Access and Success pool calculations.

Changes to the Model

- While our recommendation will be to continue to exclude non-resident students from the Access and Success calculations, consistent with state code, additional scenarios will be presented that show the effect of including those students at a reduced weight (0.25 multiplier) and full weight (1.0 multiplier).

A TWO-PHASED APPROACH TO EQUITABLE FUNDING

PHASE 1: EQUITY FUNDING

- FY 2019 budget levels will be used to establish **new base funding** levels.
- **A formula will be applied to all base budget system-wide to determine equitable funding levels for each institution. The minimum base will insure that no institution is funded below FY 2019 levels.**
- Quantitative **benchmarks** will be set for key formula metrics. **Future performance** will be measured against these benchmarks.

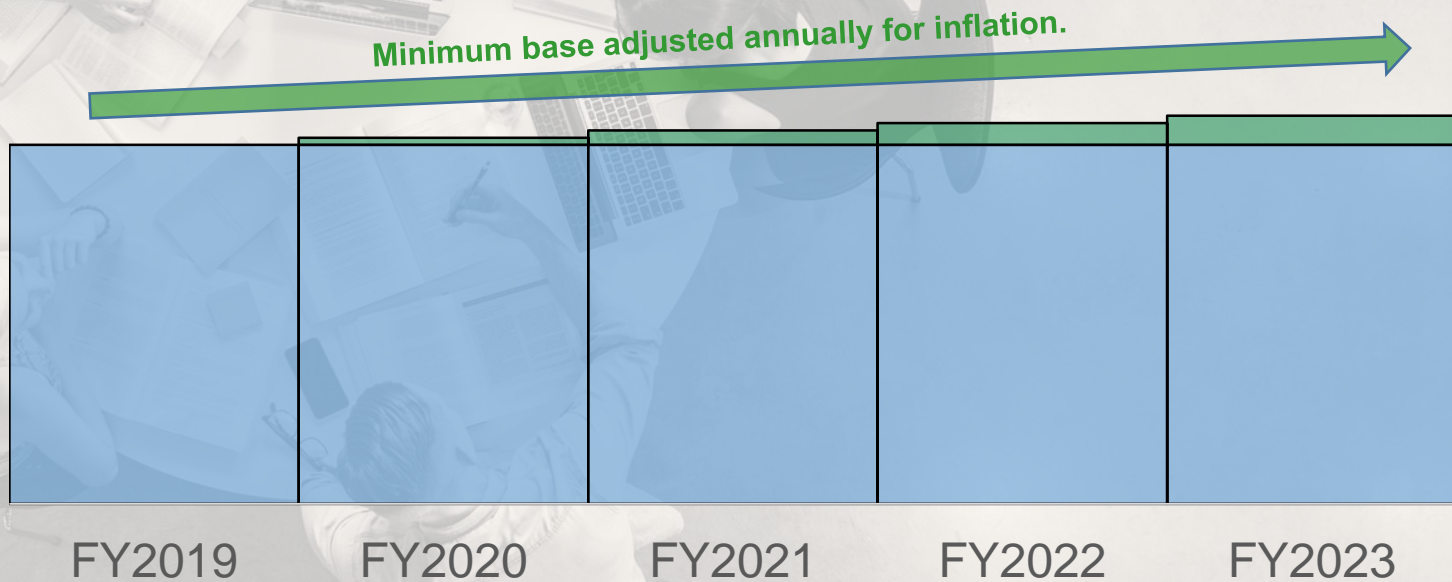
PHASE 2: RATE-BASED APPROPRIATIONS

- Each institution will receive, **at a minimum**, its inflation-adjusted **minimum base funding during the hold-harmless period.**
- Adjustments to base funding levels will be calculated based on the adopted **inflation-adjusted rates**. These rates will be used to adjust funding levels based on **performance relative to established benchmarks** on formula metrics.

Phase 1: Equity Funding	Phase 2: Rate-Based Appropriations			
Year 1	Year 2	Year 3	Year 4	Year 5

MINIMUM BASE FUNDING LEVEL

- FY 2019 base funding levels will become the minimum base. Institutional appropriations will not decline below the minimum base during the eight-year hold-harmless period.
- The base will be **adjusted annually for inflation**, as illustrated below.



A TWO-PHASED APPROACH TO EQUITABLE FUNDING

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Phase 1: Equity Funding	Phase 2: Rate-Based Appropriations			
Year 1	Year 2	Year 3	Year 4	Year 5

PHASE 1: EQUITY FUNDING

STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

Access

Weighted Credit-Hour Production

Numbers are for illustrative purposes only.

	SAMPLE Weighted Credit- Hour Production	SAMPLE Share of System Total	SAMPLE ACCESS Pool Share
Institutions	500,000	100.0%	\$15,000,000
Institution A	250,000	50.0%	\$7,500,000
Institution B	100,000	20.0%	\$3,000,000
Institution C	150,000	30.0%	\$4,500,000

SAMPLE WEIGHTED
CREDIT-HOUR
RATE:
\$30.00 / WCH



Initial values set as benchmarks

PHASE 1: EQUITY FUNDING

STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

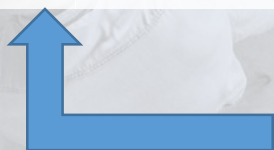
Success

Weighted Momentum Milestones Achieved

Numbers are for illustrative purposes only.

	SAMPLE Momentum Milestones Achieved	SAMPLE Share of System Total	SAMPLE SUCCESS Pool Share
Institutions	1,000	100.0%	\$1,500,000
Institution A	500	50.0%	\$750,000
Institution B	200	20.0%	\$300,000
Institution C	300	30.0%	\$450,000

SAMPLE WEIGHTED
MOMENTUM
MILESTONE RATE:
\$1,500 / WMM



Initial values set as benchmarks

PHASE 1: EQUITY FUNDING

STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

Impact

Weighted Degree Production

Numbers are for illustrative purposes only.

	SAMPLE Weighted Degree Production	SAMPLE Share of System Total	SAMPLE IMPACT Pool Share
Institutions	1,000	100.0%	\$5,000,000
Institution A	350	35.0%	\$1,750,000
Institution B	250	25.0%	\$1,250,000
Institution C	400	40.0%	\$2,000,000

SAMPLE WEIGHTED
DEGREE RATE:
\$5,000 / WD



Initial values set as benchmarks

PHASE 1: EQUITY FUNDING

STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

Research

Institutional Investments in Research

Numbers are for illustrative purposes only.

	SAMPLE Actual Research Expenditures	SAMPLE Share of System Total	SAMPLE SUCCESS Pool Share
Institutions	\$12,000,000	100.0%	\$1,500,000
Institution A	\$5,000,000	41.7%	\$625,000
Institution B	\$4,000,000	33.3%	\$500,000
Institution C	\$3,000,000	25.0%	\$375,000

RESEARCH DOLLAR
RATE:
\$0.13 / RD



Initial values set as benchmarks

PHASE 1: EQUITY FUNDING

STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

TOTAL RECOMMENDED FUNDING (ALL POOLS COMBINED)

Numbers are for illustrative purposes only.

	SAMPLE ACCESS Pool Share	SAMPLE SUCCESS Pool Share	SAMPLE IMPACT Pool Share	SAMPLE RESEARCH Pool Share	SAMPLE Total Formula Funding Level
Institutions	\$15,000,000	\$1,500,000	\$5,000,000	\$1,500,000	\$23,000,000
Institution A	\$7,500,000	\$750,000	\$1,750,000	\$625,000	\$10,625,000
Institution B	\$3,000,000	\$300,000	\$1,250,000	\$500,000	\$5,050,000
Institution C	\$4,500,000	\$450,000	\$2,000,000	\$375,000	\$7,325,000

PHASE 1: EQUITY FUNDING

STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

TOTAL RECOMMENDED FUNDING (MINIMUM BASE APPLIED)

Numbers are for illustrative purposes only.

	SAMPLE Total Formula Funding Level	SAMPLE Inflation-Adjusted FY19 Base Funding Level	SAMPLE Recommended Funding Level
Institutions	\$23,000,000	\$24,000,000	\$25,050,000
Institution A	\$10,625,000	\$11,000,000	\$11,000,000
Institution B	\$5,050,000	\$4,500,000	\$5,050,000
Institution C	\$7,325,000	\$9,000,000	\$9,000,000

Recommended funding level is
the greater of these values.

PHASE 2: RATE-BASED APPROPRIATIONS

STUDENT-FOCUSED FUNDING FORMULA SAMPLE RATE-BASED CALCULATIONS

Access

Weighted Credit-Hour Production

Numbers are for illustrative purposes only.

	SAMPLE Weighted Credit- Hour Production BENCHMARK	SAMPLE 2020 Actual Weighted Credit-Hour Production	SAMPLE Difference	SAMPLE Weighted Credit-Hour Rate	SAMPLE ACCESS Funding Change
Institutions	500,000	519,000	19,000		\$570,000
Institution A	250,000	265,000	15,000	\$30.00	\$450,000
Institution B	100,000	98,000	(2,000)	\$30.00	(\$60,000)
Institution C	150,000	156,000	6,000	\$30.00	\$180,000



Benchmark values

PHASE 2: RATE-BASED APPROPRIATIONS

STUDENT-FOCUSED FUNDING FORMULA SAMPLE RATE-BASED CALCULATIONS

Success

Weighted Momentum Milestones Achieved

Numbers are for illustrative purposes only.

	SAMPLE Weighted Momentum Milestone BENCHMARK	SAMPLE 2020 Actual Weighted Momentum Milestones	SAMPLE Difference	SAMPLE Momentum Milestone Rate	SAMPLE SUCCESS Funding Change
Institutions	1,000	1,010	10		\$15,000
Institution A	500	475	(25)	\$1,500	(\$37,500)
Institution B	200	225	25	\$1,500	\$37,500
Institution C	300	310	10	\$1,500	\$15,000



Benchmark values

PHASE 2: RATE-BASED APPROPRIATIONS

STUDENT-FOCUSED FUNDING FORMULA SAMPLE RATE-BASED CALCULATIONS

Impact

Weighted Degree Production

Numbers are for illustrative purposes only.

	SAMPLE Weighted Degree Production BENCHMARK	SAMPLE 2020 Actual Degree Production	SAMPLE Difference	SAMPLE Weighted Degree Production Rate	SAMPLE IMPACT Funding Change
Institutions	1,000	1,008	8		\$40,000
Institution A	350	342	(8)	\$5,000	(\$40,000)
Institution B	250	268	18	\$5,000	\$90,000
Institution C	400	398	(2)	\$5,000	(\$10,000)



Benchmark values

PHASE 2: RATE-BASED APPROPRIATIONS

STUDENT-FOCUSED FUNDING FORMULA SAMPLE RATE-BASED CALCULATIONS

Research

Institutional Investments in Research

Numbers are for illustrative purposes only.

	SAMPLE Research Expenditure Benchmark	SAMPLE 2020 Actual Research Expenditures	SAMPLE Difference	SAMPLE Research Expenditure Rate	SAMPLE RESEARCH EXPENDITURE Funding Change
Institutions	\$12,000,000	\$12,100,000	\$100,000		\$13,000
Institution A	\$5,000,000	\$5,100,000	\$100,000	\$0.13	\$13,000
Institution B	\$4,000,000	\$4,200,000	\$200,000	\$0.13	\$26,000
Institution C	\$3,000,000	\$2,800,000	(\$200,000)	\$0.13	(\$26,000)



Benchmark values

PHASE 2: RATE-BASED APPROPRIATIONS

STUDENT-FOCUSED FUNDING FORMULA SAMPLE RATE-BASED CALCULATIONS

TOTAL RATE-BASED FUNDING

Numbers are for illustrative purposes only.

	SAMPLE Inflation- Adjusted Base Funding Level	SAMPLE ACCESS Funding Change	SAMPLE SUCCESS Funding Change	SAMPLE IMPACT Funding Change	SAMPLE RESEARCH Funding Change	SAMPLE Recommended Funding Level
Institutions	\$25,050,000	\$570,000	\$15,000	\$40,000	\$13,000	\$25,688,000
Institution A	\$11,000,000	\$450,000	(\$37,500)	(\$40,000)	\$13,000	\$11,385,500
Institution B	\$5,050,000	(\$60,000)	\$37,500	\$90,000	\$26,000	\$5,143,500
Institution C	\$9,000,000	\$180,000	\$15,000	(\$10,000)	(\$26,000)	\$9,159,000

ESTIMATES – BASED ON FY19 VALUES

EQUITY FUNDING PHASE (YEAR 1)

	FY19 Base Budget*	ESTIMATED ACCESS Pool Funds	ESTIMATED SUCCESS Pool Funds	ESTIMATED IMPACT Pool Funds	ESTIMATED RESEARCH Pool Funds	ESTIMATED Equity Funding Level
Four-Year Institutions	\$202,789,659	\$111,534,312	\$10,139,483	\$70,976,381	\$10,139,483	\$202,789,659
Bluefield State College	\$5,600,993	\$3,235,859	\$142,240	\$2,675,102	\$2,670	\$6,055,871
Concord University	\$8,552,843	\$5,410,374	\$413,096	\$3,629,521	\$9,578	\$9,462,569
Fairmont State University	\$15,111,777	\$9,186,507	\$875,152	\$6,668,220	\$6,773	\$16,736,652
Glenville State College	\$5,885,700	\$2,698,241	\$245,851	\$1,810,738	\$0	\$4,754,830
Marshall University*	\$44,273,845	\$27,196,316	\$2,388,588	\$16,523,045	\$879,775	\$46,987,724
Potomac State College of WVU	\$3,834,937	\$1,867,647	\$210,815	\$1,531,250	\$0	\$3,609,712
Shepherd University	\$9,671,542	\$6,512,627	\$549,946	\$4,381,376	\$14,431	\$11,458,380
West Liberty University	\$7,823,727	\$4,380,318	\$479,125	\$3,381,269	\$30,716	\$8,271,428
West Virginia State University*	\$9,861,240	\$5,281,347	\$261,123	\$3,251,766	\$384,446	\$9,178,681
West Virginia University*	\$84,455,091	\$43,246,771	\$4,380,251	\$26,070,002	\$8,811,094	\$82,508,117
WVU Institute of Technology	\$7,717,964	\$2,518,305	\$193,297	\$1,054,093	\$0	\$3,765,695

*See exclusions slide for additional details.

ESTIMATES – BASED ON FY19 VALUES

EQUITY FUNDING PHASE (YEAR 1)

	FY19 Base Budget*	ESTIMATED Equity Funding Level	Change	Percent Change	Hold-Harmless Provision Dollars	Total Estimated Base (with Hold-Harmless Provision)
Four-Year Institutions	\$202,789,659	\$202,789,659	\$0	0.0%	\$7,937,897	\$210,727,556
Bluefield State College	\$5,600,993	\$6,055,871	\$454,878	8.1%	\$0	\$6,055,871
Concord University	\$8,552,843	\$9,462,569	\$909,726	10.6%	\$0	\$9,462,569
Fairmont State University	\$15,111,777	\$16,736,652	\$1,624,875	10.8%	\$0	\$16,736,652
Glenville State College	\$5,885,700	\$4,754,830	(\$1,130,870)	-19.2%	\$1,130,870	\$5,885,700
Marshall University*	\$44,273,845	\$46,987,724	\$2,713,879	6.1%	\$0	\$46,987,724
Potomac State College of WVU	\$3,834,937	\$3,609,712	(\$225,225)	-5.9%	\$225,225	\$3,834,937
Shepherd University	\$9,671,542	\$11,458,380	\$1,786,838	18.5%	\$0	\$11,458,380
West Liberty University	\$7,823,727	\$8,271,428	\$447,701	5.7%	\$0	\$8,271,428
West Virginia State University*	\$9,861,240	\$9,178,681	(\$682,559)	-6.9%	\$682,559	\$9,861,240
West Virginia University*	\$84,455,091	\$82,508,117	(\$1,946,974)	-2.3%	\$1,946,974	\$84,455,091
WVU Institute of Technology	\$7,717,964	\$3,765,695	(\$3,952,269)	-51.2%	\$3,952,269	\$7,717,964

*See exclusions slide for additional details.

Value becomes new base budget.

RATE-BASED APPROPRIATIONS

Beginning Fiscal Year 2020

Weighted **Credit-Hour** Rate

\$23.07

Weighted **Momentum** Milestone Rate

\$898

Weighted **Degree Production** Rate

\$6,302

Research Expenditure Rate

\$0.0673

- Rates will be adjusted annually for **inflation**.

NONRESIDENT STUDENT SCENARIOS

SCENARIO 1

Nonresident Students Excluded from all Calculations

	FY19 Base Budget*	ESTIMATED ACCESS Pool Funds	ESTIMATED SUCCESS Pool Funds	ESTIMATED IMPACT Pool Funds	ESTIMATED RESEARCH Pool Funds	ESTIMATED Equity Funding Level
Four-Year Institutions	\$202,789,659	\$111,534,312	\$10,139,483	\$70,976,381	\$10,139,483	\$202,789,659
Bluefield State College	\$5,600,993	\$3,235,859	\$142,240	\$2,675,102	\$2,670	\$6,055,871
Concord University	\$8,552,843	\$5,410,374	\$413,096	\$3,629,521	\$9,578	\$9,462,569
Fairmont State University	\$15,111,777	\$9,186,507	\$875,152	\$6,668,220	\$6,773	\$16,736,652
Glenville State College	\$5,885,700	\$2,698,241	\$245,851	\$1,810,738	\$0	\$4,754,830
Marshall University*	\$44,273,845	\$27,196,316	\$2,388,588	\$16,523,045	\$879,775	\$46,987,724
Potomac State College of WVU	\$3,834,937	\$1,867,647	\$210,815	\$1,531,250	\$0	\$3,609,712
Shepherd University	\$9,671,542	\$6,512,627	\$549,946	\$4,381,376	\$14,431	\$11,458,380
West Liberty University	\$7,823,727	\$4,380,318	\$479,125	\$3,381,269	\$30,716	\$8,271,428
West Virginia State University*	\$9,861,240	\$5,281,347	\$261,123	\$3,251,766	\$384,446	\$9,178,681
West Virginia University*	\$84,455,091	\$43,246,771	\$4,380,251	\$26,070,002	\$8,811,094	\$82,508,117
WVU Institute of Technology	\$7,717,964	\$2,518,305	\$193,297	\$1,054,093	\$0	\$3,765,695

*See exclusions slide for additional details.

NONRESIDENT STUDENT SCENARIOS

SCENARIO 2

Nonresident Students Included in all Calculations at **25% Weight**

	FY19 Base Budget*	ESTIMATED ACCESS Pool Funds	ESTIMATED SUCCESS Pool Funds	ESTIMATED IMPACT Pool Funds	ESTIMATED RESEARCH Pool Funds	ESTIMATED Equity Funding Level
Four-Year Institutions	\$202,789,659	\$111,534,312	\$10,139,483	\$70,976,381	\$10,139,483	\$202,789,659
Bluefield State College	\$5,600,993	\$2,899,094	\$134,077	\$2,478,225	\$2,670	\$5,514,067
Concord University	\$8,552,843	\$4,865,075	\$385,401	\$3,374,635	\$9,578	\$8,634,690
Fairmont State University	\$15,111,777	\$8,158,683	\$795,799	\$6,112,652	\$6,773	\$15,073,907
Glenville State College	\$5,885,700	\$2,449,750	\$228,628	\$1,676,079	\$0	\$4,354,456
Marshall University*	\$44,273,845	\$25,887,862	\$2,227,889	\$16,073,707	\$879,775	\$45,069,233
Potomac State College of WVU	\$3,834,937	\$1,772,725	\$196,800	\$1,474,733	\$0	\$3,444,257
Shepherd University	\$9,671,542	\$6,383,029	\$537,542	\$4,358,534	\$14,431	\$11,293,536
West Liberty University	\$7,823,727	\$4,276,754	\$479,852	\$3,319,478	\$30,716	\$8,106,800
West Virginia State University*	\$9,861,240	\$4,710,698	\$246,658	\$2,975,722	\$384,446	\$8,317,524
West Virginia University*	\$84,455,091	\$47,762,545	\$4,719,701	\$28,120,383	\$8,811,094	\$89,413,722
WVU Institute of Technology	\$7,717,964	\$2,368,097	\$187,135	\$1,012,235	\$0	\$3,567,467

*See exclusions slide for additional details.

NONRESIDENT STUDENT SCENARIOS

SCENARIO 3

Nonresident Students Included in all Calculations at **100% Weight**

	FY19 Base Budget*	ESTIMATED ACCESS Pool Funds	ESTIMATED SUCCESS Pool Funds	ESTIMATED IMPACT Pool Funds	ESTIMATED RESEARCH Pool Funds	ESTIMATED Equity Funding Level
Four-Year Institutions	\$202,789,659	\$111,534,312	\$10,139,483	\$70,976,381	\$10,139,483	\$202,789,659
Bluefield State College	\$5,600,993	\$2,293,255	\$117,670	\$2,074,854	\$2,670	\$4,488,449
Concord University	\$8,552,843	\$3,884,082	\$329,737	\$2,852,415	\$9,578	\$7,075,812
Fairmont State University	\$15,111,777	\$6,309,627	\$636,301	\$4,974,382	\$6,773	\$11,927,083
Glenville State College	\$5,885,700	\$2,002,713	\$194,010	\$1,400,184	\$0	\$3,596,906
Marshall University*	\$44,273,845	\$23,533,951	\$1,904,890	\$15,153,085	\$879,775	\$41,471,701
Potomac State College of WVU	\$3,834,937	\$1,601,958	\$168,630	\$1,358,938	\$0	\$3,129,527
Shepherd University	\$9,671,542	\$6,149,881	\$512,612	\$4,311,733	\$14,431	\$10,988,658
West Liberty University	\$7,823,727	\$4,090,443	\$481,313	\$3,192,878	\$30,716	\$7,795,350
West Virginia State University*	\$9,861,240	\$3,684,099	\$217,584	\$2,410,152	\$384,446	\$6,696,281
West Virginia University*	\$84,455,091	\$55,886,430	\$5,401,986	\$32,321,286	\$8,811,094	\$102,420,797
WVU Institute of Technology	\$7,717,964	\$2,097,873	\$174,749	\$926,474	\$0	\$3,199,096

*See exclusions slide for additional details.

NONRESIDENT STUDENT SCENARIOS

SCENARIO COMPARISON

HOLD-HARMLESS PROVISION NOT APPLIED

	ESTIMATED Percent Change Non-Resident Students Excluded	ESTIMATED Percent Change Non-Resident Students Weighted at 25 Percent	ESTIMATED Percent Change Non-Resident Students Weighted at 100 Percent
Four-Year Institutions	0.0%	0.0%	0.0%
Bluefield State College	8.1%	-1.6%	-19.9%
Concord University	10.6%	1.0%	-17.3%
Fairmont State University	10.8%	-0.3%	-21.1%
Glenville State College	-19.2%	-26.0%	-38.9%
Marshall University*	6.1%	1.8%	-6.3%
Potomac State College of WVU	-5.9%	-10.2%	-18.4%
Shepherd University	18.5%	16.8%	13.6%
West Liberty University	5.7%	3.6%	-0.4%
West Virginia State University*	-6.9%	-15.7%	-32.1%
West Virginia University*	-2.3%	5.9%	21.3%
WVU Institute of Technology	-51.2%	-53.8%	-58.5%

A FEW NOTES ON **FEEDBACK** AND **COMMENTS**

Received During and After the Comment Period

- All public comments are available for review online (link provided at the end of the presentation).
- Comments received after the conclusion of the public comment period are found at the end of the document (Section III).
- Additional comments include a funding proposal from Marshall University.
- Independent evaluation of the proposal by HCM Strategists / Lumina Strategy Labs.

ALIGNMENT WITH NATIONAL BEST PRACTICES

As Determined by HCM Strategists / Lumina Strategy Labs

	Best Practice	Original Proposal	Changes Made as a Result of Evaluation
1	Established completion or attainment goals are linked to the model.	Aligned	
2	Recurring base funding is distributed and is sustained over consecutive years.	Aligned	
3	A significant level of funding is distributed.	Aligned	
4	Limited, measurable metrics are used, with degree/credential completion being prioritized.	Aligned	
5	Institution mission is reflected though varying weights, scales or metrics.	Partially Aligned	A separate metric was added for research and development investments.
6	The funding structure is formula-driven to ensure incentives for continuous improvement.	Aligned	
7	Success of underrepresented students is prioritized.	Aligned	
8	The model is stable, both in year-to-year fluctuations and during initial implementation.	Partially Aligned	The model was calibrated using FY 2019 metric values as benchmarks. Future funding will be based on institutional performance in relation to benchmark values. Additionally, a stop-loss provision will protect institutions from budget reductions of greater than three percent in a single year, or cumulative reductions greater than five percent in any three-year period.

EXCLUSIONS

Special-Purpose Funding Excluded from Model Calculations

West Virginia University	\$50,852,726
Jackson's Mill	\$480,879
Land Grant Match (Added 9/14/2018)	\$8,104,568
State Priorities - Brownfield Professional Development	\$316,556
WVU Health Sciences	\$16,778,145
Rural Health Outreach Program	\$162,520
WVU Health Sciences - Charleston Division	\$2,218,598
WVU Health Sciences - Eastern Division	\$2,158,359
BRIM Subsidy	\$1,203,087
West Virginia University Health Sciences Rural Health Initiative Program and Site Support (Lottery Funds)	\$1,132,812
MA Public health Program and Health Sciences Technology (Lottery Funds)	\$52,445
Health Sciences Career Opportunities Program (Lottery Funds)	\$325,138
HSTA Program (Lottery Funds)	\$1,680,240
Center for Excellence in Disabilities (Lottery Funds)	\$303,739
Soft Drink Tax Appropriation	\$15,935,640
Marshall University	\$16,159,902
Brownfield Professional Development	\$309,606
WV Autism Training Center	\$1,742,215
VISTA E-Learning®	\$229,019
Marshall University Graduate College Writing Project	\$25,412
Luke Lee Listening Language and Learning Lab	\$96,203
Marshall University School of Medicine (Lottery Funds)	\$11,774,743
Rural Health Initiative Program and Site Support (Lottery Funds)	\$408,216
Vice Chancellor for Health Sciences - Rural Health Residency Program	\$166,770
Marshall University Rural health Outreach Program	\$156,022
Forensic Lab	\$226,009
Center for Rural Health	\$153,075
Marshall University Brim Subsidy	\$872,612
West Virginia State University	\$1,586,340
Land Grant Match	\$1,586,340

ADDITIONAL INFORMATION

Copies of this presentation, the original proposal, the public comment document and the HCM Strategists / Lumina Strategy Labs Report are available for download at:

<http://www.wvhepc.edu/resources/reports-and-publications/>



For questions or additional information related to this report, contact:

Dr. Chris Treadway
Senior Director of Research and Policy

chris.treadway@wvhepc.edu
304-558-1112 x269

Four-Year Institutions



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information related to this report, contact:

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Student-Focused Funding

for West Virginia Public Higher Education

Presentation to the Joint Standing Committee on Education
and the Legislative Oversight Commission on Education Accountability

September 17, 2018

Two-Year Institutions

Student-Focused Funding

for West Virginia Public Community and Technical Colleges

Presented to the Joint Standing Committee on Education
and the Legislative Oversight Commission on Education Accountability

September 17, 2018



WEST VIRGINIA
COMMUNITY & TECHNICAL
COLLEGE SYSTEM



Senator Mitch Carmichael
Senate President
and Lieutenant Governor



Delegate Roger Hanshaw
Speaker of the House



Senator Kenny Mann
Chair, Senate Committee on
Education



Delegate Paul Espinosa
Chair, House Committee
on Education



Senator Charles S. Trump IV
Chair, Senate Committee on the
Judiciary

LEGISLATIVE MANDATE

West Virginia Code §18B-1B-4(d)

The Higher Education Policy Commission shall **examine the question of general revenue appropriations** to individual higher education institutions per student, and per credit hour, and by other relevant measures at all higher education institutions, including four-year baccalaureate institutions and the community and technical colleges, and on or before January 1, 2018, the Commission shall deliver its report to the Joint Committee on Government and Finance and the Legislative Oversight Commission on Education Accountability.

This report shall include a recommendation to the Legislature on a formula for the allocation of general revenue to be appropriated to such institutions that provides for ratable funding across all four-year institutions and community and technical colleges on a ratable basis, by enrolled student, by credit hour or by other relevant measures. On such basis, the Commission shall make a recommendation to the Legislature as to the amounts that each such institution should have appropriated to it in the general revenue budget for fiscal year 2019, based upon the total general revenue appropriations that such institutions receive in aggregate in the enacted budget for fiscal year 2018.



A NEW FORMULA MUST...

- focus **state taxpayer dollars** on educating West Virginia **resident** students;
- provide the Higher Education Policy Commission and West Virginia Council for Community and Technical College Education with a **fair and equitable** means of calculating **recommended institutional funding levels**;
- account for **variations in the missions** of the state's public institutions and the unique needs of their **diverse student populations**;
- be based upon **reliable metrics** drawn from **existing data resources**;
- be **straightforward** and **easy to understand**;
- be **transparent** and **auditable**;
- promote **innovation** and **student success**; and
- **reward** institutional successes with additional funding.



PROPOSED STUDENT-FOCUSED FUNDING FORMULA FRAMEWORK

Access

Weighted Credit-Hour Production

- The sum of credit-hours attempted and credit hours earned by students in an academic year.
- Credit-hours weighted based on academic discipline and course level.
- Additional weight applied to students in high-risk populations (academically underprepared, underserved racial or ethnic minority, adults [aged 20+] and economically-disadvantaged).

Success

Weighted Certificate and Degree Production

- The number of students earning a certificate (1.0 points) or degree (1.5 points) in an academic year.
- Additional weight applied to degrees and certificates in high-demand fields.
- Additional weight applied to graduates in high-risk populations (academically underprepared, underserved racial or ethnic minority, adults [aged 20+] and economically-disadvantaged).

Workforce Development

Non-Credit Clock-Hour Production

- The number of clock hours completed in non-credit workforce development programs in an academic year.
- ***Please note the current workforce development data limitations on the next page.***



CURRENT LIMITATIONS WITH WORKFORCE DEVELOPMENT DATA

A significant and important element of a community college's mission is offering non-credit workforce development training in response to changes in workforce demand. This work is typically unaccounted for in standard higher education productivity metrics such as enrollment values and graduation rates. West Virginia's community college leaders generally agree that a new community college funding formula must recognize institutional efforts to respond to the needs of local employers and help students acquire the skills required to fill in-demand jobs through non-credit workforce development programs.

The community college funding formula proposal sets aside a pool of funding to support this important work; however, data used to produce the workforce development pool distribution estimates contained herein are themselves estimates, based on the limited non-credit data presently collected by the Community and Technical College System central office. Should the Legislature choose to adopt a final model that includes the workforce development pool, CTCS staff will work closely with our institutions on improvements to the workforce development data collection and submission process.



CREDIT-HOUR **WEIGHTING** TABLE

PAGE 1 OF 2

Discipline Clusters	Lower Division	Upper Division
Liberal Arts, Math, Social Science, Languages, Other	1.0	2.0
05. Area, Ethnic, Cultural & Gender Studies	1.0	2.0
09. Communication, Journalism and related programs	1.0	2.0
16. Foreign Languages, Literature and Linguistics	1.0	2.0
19. Family and Consumer Sciences/Human Sciences	1.0	2.0
23. English Language & Literature/Letters	1.0	2.0
24. Liberal Arts & Sciences, General Studies and Humanities	1.0	2.0
25. Library Science	1.0	2.0
27. Mathematics & Statistics	1.0	2.0
28. Reserve Officer Training Corps	1.0	2.0
29. Military Technologies	1.0	2.0
30. Multi/Interdisciplinary Studies	1.0	2.0
38. Philosophy & Religious Studies	1.0	2.0
42. Psychology and Applied Psychology	1.0	2.0
45. Social Sciences	1.0	2.0
54. History	1.0	2.0
99. Honors Curriculum and Other	1.0	2.0
Basic Skills Cluster	1.5	
32. Basic Skills	1.5	
Business Cluster (Business, Public Administration)	1.0	2.0
44. Public Administration & Social Service Professions	1.0	2.0
52. Business Management, Marketing & related support services	1.0	2.0
Education Cluster	1.5	2.0
13. Education	1.5	2.0
Services Cluster (Personal, Protective, Recreation)	1.5	2.0
31. Parks, Recreation, Leisure & Fitness Studies	1.5	2.0
36. Leisure and Recreational Activities	1.5	2.0
12. Personal & Culinary Services	1.5	2.0
43. Security and Protective Services	1.5	2.0

Source: Nevada System of Higher Education



CREDIT-HOUR **WEIGHTING** TABLE

PAGE 2 OF 2

Visual and Performing Arts Cluster	1.5	2.5
50. Visual & Performing Arts	1.5	2.5
Trades/Tech Cluster (Construction, Mechanic Tech, Precision Production)	2.0	2.5
46. Construction Trades	2.0	2.5
47. Mechanic Repair Technologies/Technicians	2.0	2.5
48. Precision Production	2.0	2.5
49. Transportation & Materials Moving	2.0	2.5
Sciences Cluster (Agriculture, Computer, Biology, Physical)	2.0	3.0
01. Agricultural, Agriculture Operations & related sciences	2.0	3.0
03. Natural Resources & Conservation	2.0	3.0
11. Computer & Information Sciences & Support Services	2.0	3.0
26. Biological & Biomedical Sciences	2.0	3.0
40. Physical Sciences	2.0	3.0
Law Cluster	2.0	2.0
22. Legal Professions and Studies	2.0	2.0
Engineering/Architecture Cluster	2.0	3.0
04. Architecture	2.0	3.0
14. Engineering	2.0	3.0
15. Engineering Technologies/Technicians	2.0	3.0
Health Cluster	2.0	2.0
51. Nursing, Allied Health, Health Professions	2.0	2.0

Source: Nevada System of Higher Education



A TWO-PHASED APPROACH TO EQUITABLE FUNDING

PHASE 1: EQUITY FUNDING

- FY 2019 budget levels will be used to establish new base funding levels.
- A formula will be applied to all base budget system-wide to determine equitable funding levels for each institution.
- The minimum base will insure that no institution is funded below FY 2019 levels during the hold-harmless period.
- Quantitative **benchmarks** will be set for key formula metrics. **Future performance** will be measured against these benchmarks.

PHASE 2: RATE-BASED APPROPRIATIONS

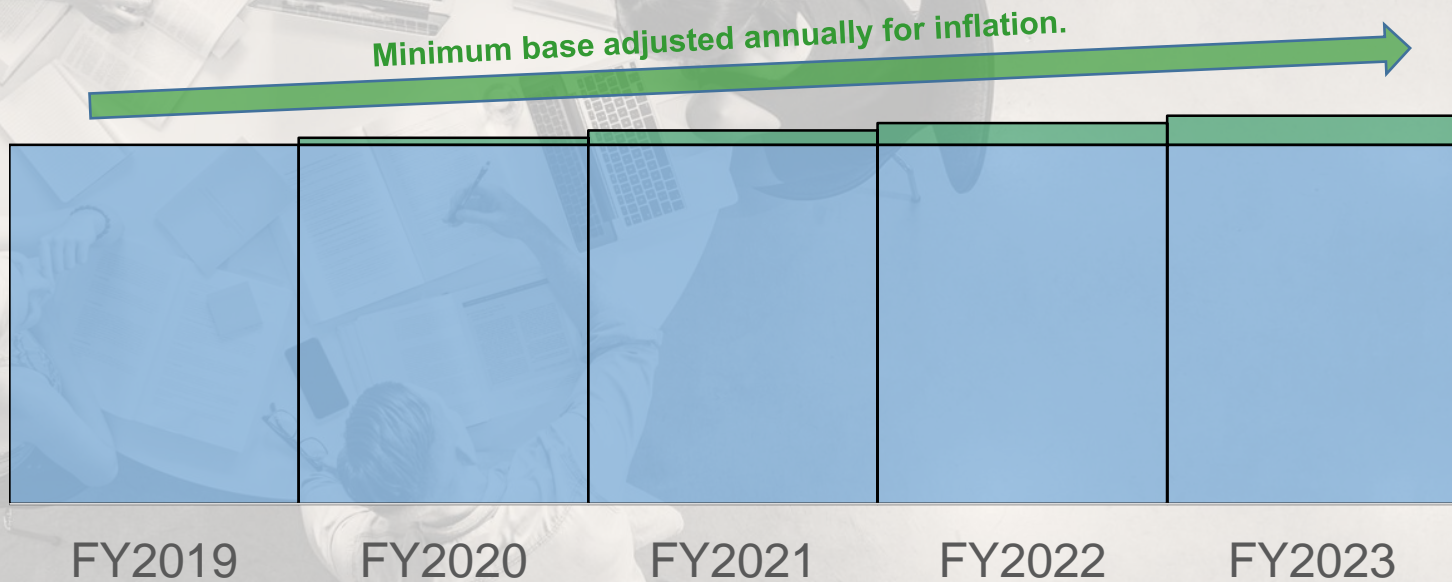
- Each institution will receive, **at a minimum**, its inflation-adjusted **minimum base funding during the hold-harmless period**.
- Adjustments to base funding levels will be calculated based on the adopted inflation-adjusted rates. These rates will be used to adjust funding levels based on performance relative to established benchmarks on formula metrics.

Phase 1: Equity Funding	Phase 2: Rate-Based Appropriations			
Year 1	Year 2	Year 3	Year 4	Year 5



MINIMUM BASE FUNDING LEVEL

- Institutional appropriations will not decline below the minimum base during the eight-year hold-harmless period.
- The base will be **adjusted annually for inflation**, as illustrated below.



PHASE 1: EQUITY FUNDING

PROPOSED STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

Access

Weighted Credit-Hour Production

Numbers are for illustrative purposes only.

	SAMPLE <u>Weighted Credit-Hour Production</u>	SAMPLE <u>Share of System Total</u>	SAMPLE <u>ACCESS Pool Share</u>
Institutions	500,000	100.0%	\$15,000,000
Institution A	250,000	50.0%	\$7,500,000
Institution B	100,000	20.0%	\$3,000,000
Institution C	150,000	30.0%	\$4,500,000

SAMPLE WEIGHTED
CREDIT-HOUR
RATE:
\$30.00 / WCH



Initial values set as benchmarks



PHASE 1: EQUITY FUNDING

PROPOSED STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

Success

Weighted Certificate and Degree Production

Numbers are for illustrative purposes only.

	SAMPLE Weighted Degree Production	SAMPLE Share of System Total	SAMPLE SUCCESS Pool Share
Institutions	1,000	100.0%	\$5,000,000
Institution A	350	35.0%	\$1,750,000
Institution B	250	25.0%	\$1,250,000
Institution C	400	40.0%	\$2,000,000

SAMPLE WEIGHTED
DEGREE RATE:
\$5,000 / WD



Initial values set as benchmarks



PHASE 1: EQUITY FUNDING

PROPOSED STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

Workforce Development

Non-Credit Clock-Hour Production

Numbers are for illustrative purposes only.

	SAMPLE Clock-Hour Production	SAMPLE Share of System Total	SAMPLE WORKFORCE DEVELOPMENT Pool Share
Institutions	550,000	100.0%	\$10,000,000
Institution A	225,000	40.9%	\$4,090,909
Institution B	150,000	27.3%	\$2,727,273
Institution C	175,000	31.8%	\$3,181,818

SAMPLE WEIGHTED
CLOCK-HOUR
RATE:

\$18.18 / WCLH

Initial values set as benchmarks



PHASE 1: EQUITY FUNDING

PROPOSED STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

TOTAL RECOMMENDED FUNDING (ALL POOLS COMBINED)

Numbers are for illustrative purposes only.

	SAMPLE ACCESS Pool Share	SAMPLE SUCCESS Pool Share	SAMPLE WORKFORCE DEVELOPMENT Pool Share	SAMPLE Total Formula Funding Level
Institutions	\$15,000,000	\$5,000,000	\$10,000,000	\$30,000,000
Institution A	\$7,500,000	\$1,750,000	\$4,090,909	\$13,340,909
Institution B	\$3,000,000	\$1,250,000	\$2,727,273	\$6,944,273
Institution C	\$4,500,000	\$2,000,000	\$3,181,818	\$9,681,818



PHASE 1: EQUITY FUNDING

PROPOSED STUDENT-FOCUSED FUNDING FORMULA SAMPLE EQUITY FUNDING CALCULATIONS

TOTAL RECOMMENDED FUNDING (MINIMUM BASE APPLIED)

Numbers are for illustrative purposes only.

	SAMPLE Total Formula Funding Level	SAMPLE Inflation-Adjusted Minimum Base Funding Level	SAMPLE Recommended Funding Level
Institutions	\$30,000,000	\$30,000,000	\$30,944,273
Institution A	\$13,340,909	\$14,000,000	\$14,000,000
Institution B	\$6,944,273	\$6,000,000	\$6,944,273
Institution C	\$9,681,818	\$10,000,000	\$10,000,000

Recommended funding level is
the greater of these values.



PHASE 2: RATE-BASED APPROPRIATIONS

PROPOSED STUDENT-FOCUSED FUNDING FORMULA SAMPLE RATE-BASED CALCULATIONS

Access

Weighted Credit-Hour Production

Numbers are for illustrative purposes only.

	SAMPLE Weighted Credit- Hour Production BENCHMARK	SAMPLE 2020 Actual Weighted Credit-Hour Production	SAMPLE Difference	SAMPLE Model-Eligible Hours	SAMPLE Weighted Credit-Hour Rate	SAMPLE Additional ACCESS Funding
Institutions	500,000	519,000	19,000	21,000		\$630,000
Institution A	250,000	265,000	15,000	15,000	\$30.00	\$450,000
Institution B	100,000	98,000	(2,000)	0	\$30.00	\$0.00
Institution C	150,000	156,000	6,000	6,000	\$30.00	\$180,000



Benchmark values



PHASE 2: RATE-BASED APPROPRIATIONS

PROPOSED STUDENT-FOCUSED FUNDING FORMULA SAMPLE RATE-BASED CALCULATIONS

Success

Weighted Certificate and Degree Production

Numbers are for illustrative purposes only.

	SAMPLE Weighted Degree Production BENCHMARK	SAMPLE 2020 Actual Degree Production	SAMPLE Difference	SAMPLE Model-Eligible Credentials	SAMPLE Weighted Degree Production Rate	SAMPLE Additional SUCCESS Funding
Institutions	1,000	1,008	8	18		\$90,000
Institution A	350	342	(8)	0	\$5,000	\$0
Institution B	250	268	18	18	\$5,000	\$90,000
Institution C	400	398	(2)	0	\$5,000	\$0



Benchmark values



PHASE 2: RATE-BASED APPROPRIATIONS

PROPOSED STUDENT-FOCUSED FUNDING FORMULA SAMPLE RATE-BASED CALCULATIONS

Workforce Development

Non-Credit Clock-Hour Production

Numbers are for illustrative purposes only.

	SAMPLE Weighted Clock- Hour Production BENCHMARK	SAMPLE 2020 Actual Weighted Clock-Hour Production	SAMPLE Difference	SAMPLE Model-Eligible Hours	SAMPLE Weighted Clock-Hour Rate	SAMPLE Additional WORKFORCE DEVELOPMENT Funding
Institutions	550,000	553,000	3,000	13,000		\$236,340
Institution A	225,000	235,000	10,000	10,000	\$18.18	\$181,800
Institution B	150,000	140,000	(10,000)	0	\$18.18	\$0
Institution C	175,000	178,000	3,000	3,000	\$18.18	\$54,500



Benchmark values



PHASE 2: RATE-BASED APPROPRIATIONS

PROPOSED STUDENT-FOCUSED FUNDING FORMULA SAMPLE RATE-BASED CALCULATIONS

TOTAL RATE-BASED FUNDING

Numbers are for illustrative purposes only.

	SAMPLE Inflation- Adjusted Minimum Base Funding Level	SAMPLE Additional ACCESS Funding	SAMPLE Additional SUCCESS Funding	SAMPLE Additional WORKFORCE DEVELOPMENT Funding	SAMPLE Recommended Funding Level
Institutions	\$30,000,000	\$630,000	\$90,000	\$236,340	\$30,956,340
Institution A	\$14,000,000	\$450,000	\$0	\$181,800	\$14,631,800
Institution B	\$6,000,000	\$0.00	\$90,000	\$0	\$6,090,000
Institution C	\$10,000,000	\$180,000	\$0	\$54,500	\$10,234,500





WEST VIRGINIA
COMMUNITY & TECHNICAL
COLLEGE SYSTEM

For questions or additional
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Two-Year Institutions

Student-Focused Funding

for West Virginia Public Community and Technical Colleges



WEST VIRGINIA
COMMUNITY & TECHNICAL
COLLEGE SYSTEM

Sample State Funding Detail by Degree Map
Bachelor's Degree in English, No High-Risk Weights Applied

BA English		Credit Hours Attempted	Credit Hours Earned	Level / Discipline Weight	Credit-Hour Rate	Amount	
Semester 1	CMM	103	3	3	1.0	\$23.07	\$138.42
	ENG	101	3	3	1.0	\$23.07	\$138.42
	FYS	100	3	3	1.0	\$23.07	\$138.42
	MTH	121	3	3	1.0	\$23.07	\$138.42
	Foreign Language		3	3	1.0	\$23.07	\$138.42
Semester 2	ENG	200	3	3	1.0	\$23.07	\$138.42
	ENG	201	3	3	1.0	\$23.07	\$138.42
	ART	112	3	3	1.0	\$23.07	\$138.42
	Social Science		3	3	1.0	\$23.07	\$138.42
	Foreign Language 2		3	3	1.0	\$23.07	\$138.42
	> 30-Hour Milestone Achieved						\$898.00
Semester 3	ENG	350	3	3	2.2	\$23.07	\$304.52
	Natural Science		4	3	2.0	\$23.07	\$322.98
	Social Science		3	3	1.0	\$23.07	\$138.42
	Social Science		3	3	1.0	\$23.07	\$138.42
	Foreign Language 3		3	3	1.0	\$23.07	\$138.42
Semester 4	ENG	355	3	3	2.2	\$23.07	\$304.52
	ENG	203	3	3	1.0	\$23.07	\$138.42
	Natural Science		4	3	2.0	\$23.07	\$322.98
	Social Science		3	3	1.0	\$23.07	\$138.42
	Elective	300	3	3	2.2	\$23.07	\$304.52
	> 60-Hour Milestone Achieved						\$898.00
Semester 5	ENG Elective	300	3	3	2.2	\$23.07	\$304.52
	ENG Elective	400	3	3	2.2	\$23.07	\$304.52
	Gen Elective 1	300	3	3	2.2	\$23.07	\$304.52
	Gen Elective 2	400	3	3	2.2	\$23.07	\$304.52
	Gen Elective 3	300	3	3	2.2	\$23.07	\$304.52
Semester 6	Gen Elective 4	300	3	3	2.2	\$23.07	\$304.52
	Gen Elective 5	400	3	3	2.2	\$23.07	\$304.52
	ENG Elective	300	3	3	2.2	\$23.07	\$304.52
	ENG Elective	400	3	3	2.2	\$23.07	\$304.52
	ENG Elective	400	3	3	2.2	\$23.07	\$304.52
	> 90-Hour Milestone Achieved						\$898.00
Semester 7	Gen Elective		3	3	1.0	\$23.07	\$138.42
	ENG	428	3	3	2.2	\$23.07	\$304.52
	ENG	203	3	3	2.2	\$23.07	\$304.52
	Gen Elective	300	3	3	2.2	\$23.07	\$304.52
	Gen Elective	400	3	3	2.2	\$23.07	\$304.52
	Gen Elective	400	3	3	2.2	\$23.07	\$304.52
Semester 8	ENG	420	3	3	2.2	\$23.07	\$304.52
	Gen Elective	300	3	3	2.2	\$23.07	\$304.52
	Gen Elective	400	3	3	2.2	\$23.07	\$304.52
	Gen Elective	400	3	3	2.2	\$23.07	\$304.52
	Gen Elective	400	3	3	2.2	\$23.07	\$304.52
	> Degree Earned						\$6,302.00
Total Credit-Hour Production Funding							\$9,864.73
Momentum Milestone Total							\$2,694.00
Degree Earned							\$6,302.00
Total Formula Funding							\$18,860.73

Bachelor's Degree in Engineering, No High-Risk Weights Applied

BA English		Credit Hours Attempted	Credit Hours Earned	Level / Discipline Weight	Credit-Hour Rate	Amount	
Semester 1	CHM	211	3	3	2.0	\$23.07	\$276.84
	ENGR	103	1	1	2.0	\$23.07	\$92.28
	ENGR	104	1	1	2.0	\$23.07	\$92.28
	MTH	229	5	5	1.0	\$23.07	\$230.70
	ENG	101	3	3	1.0	\$23.07	\$138.42
	FYS	100	3	3	1.0	\$23.07	\$138.42
Semester 2	CS	110	3	3	2.0	\$23.07	\$276.84
	MTH	230	4	4	1.0	\$23.07	\$184.56
	PHYS	211	4	4	2.0	\$23.07	\$369.12
	CMM	103	3	3	1.0	\$23.07	\$138.42
	Social Science		3	3	1.0	\$23.07	\$138.42
	> 30-Hour Milestone Achieved						\$898.00
Semester 3	EE	210	3	3	2	\$23.07	\$276.84
	ENGR	201	4	4	2	\$23.07	\$369.12
	MTH	231	4	4	1	\$23.07	\$184.56
	PHYS	204	1	1	2	\$23.07	\$92.28
	PHYS	213	4	4	2	\$23.07	\$369.12
	Semester 4	ENGR	202	4	4	2	\$23.07
ENGR		215	3	3	2	\$23.07	\$276.84
ENGR		217	1	1	2	\$23.07	\$92.28
ENGR		265	4	4	2	\$23.07	\$369.12
MTH		220	3	3	1	\$23.07	\$138.42
MTH		335	3	3	2.2	\$23.07	\$304.52
> 60-Hour Milestone Achieved							\$898.00
Semester 5	EE	310	3	3	3.3	\$23.07	\$456.79
	EE	320	3	3	3.3	\$23.07	\$456.79
	EE	350	3	3	3.3	\$23.07	\$456.79
	EE	360	3	3	3.3	\$23.07	\$456.79
	ENGR	204	4	4	2	\$23.07	\$369.12
	Semester 6	EE	330	3	3	3.3	\$23.07
EE		340	4	4	3.3	\$23.07	\$609.05
EE		380	3	3	3.3	\$23.07	\$456.79
ENGR		221	3	3	2	\$23.07	\$276.84
ENG		201	3	3	2	\$23.07	\$276.84
> 90-Hour Milestone Achieved							\$898.00
Semester 7	EE	412	3	3	3.3	\$23.07	\$456.79
	ENGR	451	3	3	3.3	\$23.07	\$456.79
	Humanities		3	3	1	\$23.07	\$138.42
	Tech Elective		3	3	2	\$23.07	\$276.84
	Tech Elective		3	3	2	\$23.07	\$276.84
	Tech Elective		3	3	2	\$23.07	\$276.84
	Semester 8	EE	420	3	3	3.3	\$23.07
Fine Arts			3	3	1	\$23.07	\$138.42
Tech Elective			3	3	2	\$23.07	\$276.84
Tech Elective			3	3	2	\$23.07	\$276.84
Free Elective			3	3	1	\$23.07	\$138.42
> Degree Earned - HIGH DEMAND FIELD WEIGHT OF 1.50 APPLIED							\$9,453.00
Total Credit-Hour Production Funding							\$12,360.91
Momentum Milestone Total							\$2,694.00
Degree Earned							\$9,453.00
Total Formula Funding							\$24,507.91

Master's Degree in Business Administration, No High-Risk Weights Applied

BA English		Credit Hours Attempted	Credit Hours Earned	Level / Discipline Weight	Credit-Hour Rate	Amount	
Semester 1	ECN	501	3	3	4.4	\$23.07	\$609.05
	ACC	510	3	3	4.4	\$23.07	\$609.05
	FIN	510	3	3	4.4	\$23.07	\$609.05
Semester 2	MKT	511	3	3	4.4	\$23.07	\$609.05
	MGT	500	3	3	4.4	\$23.07	\$609.05
	MGT	601	3	3	4.4	\$23.07	\$609.05
Semester 3	ACC	613	3	3	4.4	\$23.07	\$609.05
	FIN	620	3	3	4.4	\$23.07	\$609.05
	ECN	630	3	3	4.4	\$23.07	\$609.05
Semester 4	MGT	672	3	3	4.4	\$23.07	\$609.05
	MGT	674	3	3	4.4	\$23.07	\$609.05
	MIS	678	3	3	4.4	\$23.07	\$609.05
Semester 5	MKT	682	3	3	4.4	\$23.07	\$609.05
	MGT	699	3	3	4.4	\$23.07	\$609.05
	Elective		3	3	4.4	\$23.07	\$609.05
Semester 6	Elective		3	3	4.4	\$23.07	\$609.05
	Elective		3	3	4.4	\$23.07	\$609.05
> Degree Earned							\$6,302.00
Total Credit-Hour Production Funding							\$10,353.82
Momentum Milestone Total							N/A
Degree Earned							\$6,302.00
Total Formula Funding							\$16,655.82

Doctoral Degree in Leadership Studies, No High-Risk Weights Applied

BA English		Credit Hours Attempted	Credit Hours Earned	Level / Discipline Weight	Credit-Hour Rate	Amount	
Semester 1	LS	724	3	3	5.5	\$23.07	\$761.31
	LS	710	3	3	5.5	\$23.07	\$761.31
	LS	707	3	3	5.5	\$23.07	\$761.31
Semester 2	LS	720	3	3	5.5	\$23.07	\$761.31
	LS	740	3	3	5.5	\$23.07	\$761.31
	LS	756	3	3	5.5	\$23.07	\$761.31
Semester 3	EDF	676	3	3	5.5	\$23.07	\$761.31
	EDF	703	3	3	5.5	\$23.07	\$761.31
	EDF	625	3	3	5.5	\$23.07	\$761.31
Semester 4	EDF	711	3	3	5.5	\$23.07	\$761.31
	LS	764	3	3	5.5	\$23.07	\$761.31
	LS	765	3	3	5.5	\$23.07	\$761.31
Semester 5	LS	797	9	9	5.5	\$23.07	\$2,283.93
> Degree Earned							\$6,302.00
Total Credit-Hour Production Funding							\$11,419.65
Momentum Milestone Total							N/A
Degree Earned							\$6,302.00
Total Formula Funding							\$17,721.65



West Virginia Higher Education Policy Commission Student Success Funding Model Analysis

The West Virginia Higher Education Policy Commission requested support from Lumina Strategy Labs to conduct an independent review of the proposed funding formula presented to the Commission on March 23, 2018. Lumina Strategy Labs provides content expertise and technical assistance support to state leaders and policymakers on policies designed to increase higher education attainment. HCM Strategists, which supports the management and content development for Strategy Labs, has engaged with several states during the development and implementation of outcomes-based funding models.

This report is intended to provide summative analysis of the proposed university funding model, specifically the model's alignment to recognized outcomes-based funding best practices and to the state's master plan goals and priorities. The summary also provides recommendations for how the model approach could be strengthened to enhance this alignment and incorporate research and state practice-informed principles around the design and implementation of funding models intended to support key strategic priorities and student success.

Assessment of the Proposed Model Relative to Recognized Best Practices

In recent years, more states have begun using outcomes-based funding (OBF) models as a way to promote student success and align funding with state goals and priorities. HCM Strategists produces an annual report that establishes a comprehensive typology of OBF models and a state-by-state classification of funding systems informed by research and engagement with state policymakers.¹ Reflected in this typology report as well as the Lumina State Policy Agenda, there are a set of common principles and design approaches that help to enhance these models' alignment between funding and goals to increase student attainment and equity.² These include:

- Established completion or attainment goals are linked to the model;
- Recurring base funding is distributed and is sustained over consecutive years;
- A significant level of funding is distributed;

¹ Driving Better Outcomes: Fiscal Year 2018 State Status & Typology Update
http://hcmstrategists.com/wp-content/uploads/2018/03/HCM_DBO_Document_v3.pdf

² Lumina State Policy Agenda: 2017-20
<https://www.luminafoundation.org/resources/lumina-state-policy-agenda-2017-2020>

- Limited, measurable metrics are used, with degree/credential completion being prioritized;
- Institution mission is reflected through varying weights, scales or metrics;
- The funding structure is formula-driven to ensure incentives for continuous improvement;
- Success of underrepresented students is prioritized; and
- The model is stable, both in year-to-year fluctuations and during initial implementation

This section analyzes the proposed funding model relative to these common principles and places the model elements into two categories:

- 1) Elements aligned to best practices;
- 2) Elements not aligned or partially aligned with best practices

Proposed Model Elements Aligned with Best Practices

- Established completion or attainment goals are linked to the model
 - Rationale: State leadership must be firmly committed to and clearly articulate statewide priorities, such as a goal to increase the percentage of residents who complete a postsecondary degree. Securing agreement around a bipartisan, statewide “public agenda” that is targeted to the state’s needs and its residents—not just postsecondary institutions—before developing an OBF policy will help focus development and ensure the model’s sustainability.
 - Model Status: Aligned. The goals of the model are closely linked to those in the HEPC master plan: Access, success, and impact. Additionally, the model’s focus on student success, through both progression and degree production metrics, is aligned with the state’s recently established goal to have 60 percent of the state’s workforce with a formal education credential beyond high school by the year 2030.
- Recurring base funding is distributed and is sustained over consecutive years
 - Rationale: Models that are based only on new funding have significant challenges in sustainability and reflect limited alignment of state postsecondary investments with state attainment needs. If the outcomes-based formula is

implemented with new money only, this bonus allocation is often the first thing reduced or eliminated in tight budget climates. Building OBF into institutions' recurring allocations promotes sustainability and ensures that the policy intent does not languish while waiting for new funding that may never materialize.

- Model Status: Aligned. The model distributes base funding and any new funding. This ensures the funding policy will be sustained in future years.
- A significant level of funding is distributed
 - Rationale: The share of institutional funding devoted to OBF must be large enough to garner attention, shape priorities and influence actions. Research has shown positive effects on student success from models that distribute as low as five percent of state operating funding, though model structure and metrics must be considered when determining a sufficient funding amount. As the intent is to align the state's finance policy with the state's policy priorities, as was done with enrollment-driven policies, it would hold that a similar approach should be taken with outcomes-based funding policies. The less the allocation model is tied to outcomes, the less the state's finance policy is aligned with its completion priorities and needs.
 - Model Status: Aligned. The model distributes all state funding, less special purpose appropriations, based on access, success, and impact metrics. This is above the five percent threshold identified in the rationale, and is in line with some of the more robust funding models used by other states.
- Limited, measurable metrics are used, with degree/credential completion being prioritized
 - Rationale: OBF models must be clearly tied to the state's goals and priorities and include metrics identified at the outset that are easily measured and available; otherwise, the system may be compromised or lose credibility. Metrics that are ambiguous, easy to game or inconsistently reported should not be included. For instance, metrics should emphasize the volume of graduates versus graduation rates, as rates are easier to game.

Furthermore, the model should track a limited number of metrics, or risk diluting the focus on key priorities.

- Model Status: Aligned. The model uses relatively few metrics and they are all aligned with the three goals of access, success, and impact. Additionally, volume-based metrics are used instead of rate-based metrics and degree/credential completion is given significant weight.
- The funding structure is formula-driven to ensure incentives for continuous improvement
 - Rationale: Formula-driven models use a structured set of rules to distribute funding. There are many versions. A model may award a certain dollar amount for each additional outcome produced, or a model may allocate funding toward institutions that produce a larger share of outcomes relative to other institutions. The key distinction is that formula-driven models do not use pre-set targets or goals. Targets and goals are extremely difficult to appropriately set. Properly setting a target or goal requires a vast amount of information about institutions' current and future operations and resources. Furthermore, targets and goals cannot account for future circumstances that are outside of institutions' control. For example, unforeseen economic recessions or expansions may have large effects on student enrollment. In practice, the targets and goals end up being too ambitious or not ambitious enough. Additionally, targets and goals do not provide a continuous incentive for improvement. For example, if an institution's goal is to produce 100 additional degrees, there is no incentive to produce the 101st degree.
 - Model Status: Aligned. The model is formula-driven. It does not use pre-set targets and goals. Instead it distributes funding based on each institution's share of outcomes produced. This methodology provides continuous incentives for improvement.
- Success of underrepresented students is prioritized
 - Rationale: Extra weight for outcomes earned by underrepresented students (e.g. academically underprepared, low-income, adult or underrepresented students) guards against the unintended consequence of restricting access by enrolling

only those students most likely to succeed. Additionally, the success of students from underserved populations is critical to meeting states' workforce needs.

- Model Status: Aligned. The model provides a 1.5 multiple as a premium for high-risk populations. These populations include economically disadvantaged, non-traditional (adult) students, academically underprepared students, and racial and ethnic minority students. The 1.5 premium is in line with the magnitude of premiums used in other state models.

Proposed Model Elements Not Aligned or Partially Aligned with Best Practices

- Institution mission is reflected through varying weights, scales or metrics
 - Rationale: Models should account for differences in institutional mission, student population and other characteristics. This helps to guard against mission creep and ensures that some institutions are not at an initial disadvantage compared to other institutions with missions more aligned with model metrics. Some OBF models apply a few metrics across institutions, while adopting other unique metrics and weighting them differently across types of institutions.
 - Model Status: Partially aligned. The model differentiates among institutions in two ways. First, West Virginia University, Marshall University, and West Virginia State University have an additional research institution weight applied across all measures. This is to recognize their higher cost of instruction and also to account for their research. Second, special purpose funding, for activities not directly related to the instructional mission of institutions, is excluded from the model. Mission differentiation could be enhanced by adding a separate metric for external (non-state funded) research and public service expenditures and also by varying the weights of the funding pools based on mission. For example, institutions with more of an access mission could have a higher weight on access or success metrics and a lower weight on impact metrics. Additionally, any other funding that is similar to special purpose funding in that it doesn't directly relate to the

core mission of an institution, such as funding for medical and dental schools, should be excluded.

- The model is stable, both in year-to-year fluctuations and during initial implementation
 - Rationale: To prevent large, disruptive shifts in funding, the impact of new funding models should be calibrated to allow institutions time to adjust to new expectations. Upon implementation, states have also used a stop-loss or other calibration methods, such as phasing in the percentage of the formula based on outcomes.
 - Model Status: Partially aligned. The model uses a three-year average of data to increase stability and an extended hold-harmless to phase-in the model. Additionally, the metrics used in the model are not be expected to fluctuate greatly. There would, however, be large shifts in funding in the first year of implementation, absent the hold harmless. Glenville State would lose over 17 percent of state funding compared to FY18 levels, West Virginia University would lose almost 9 percent, and West Virginia Institute of Technology would lose over 44 percent. These large changes in funding may still occur when the hold harmless is removed. To assist with a smooth implementation and to not disadvantage any institution based on performance data produced before the model was implemented, the model could be calibrated so the initial year's calculation equals current funding levels. Any future changes in funding would then be a result of the relative change in outcomes among institutions. Alternatively, institutions showing initial funding decreases could be appropriated additional funds so they would not lose funding due to implementation.

Assessment of the Proposed Model Relative to Master Plan Goals

This section analyzes the proposed funding model relative to the goals of the master plan, "Leading the Way" adopted by the Higher Education Policy Commission in 2013. The master plan set as an objective the solidifying of higher education as a means to success for West Virginians and as an economic catalyst for the state. The plan is oriented around three priority areas intended to address, in various ways, this objective. The priority areas include:

- **Access**: Increase access to postsecondary education for both traditional and non-traditional aged West Virginians.
- **Success**: Increase the number of students at system institutions completing quality academic programs.
- **Impact**: Increase the impact public colleges and universities have on West Virginia through production of graduates ready to contribute to the workforce and the community, provision of needed services, and research and development activities that advance the state's economy.

Each priority area is supplemented by several supporting goals. This section examines these goals and places them into three general groups –

- 1) Goals Aligned with the Proposed Model or Those That Can be Enhanced Through Revisions Aligned to Best-Practice Principles;
- 2) Goals Not Directly Aligned with the Proposed Model or Those That Can be Enhanced Through Revisions Aligned to Best-Practice Principles;
- 3) Goals Not Supported by the Proposed Model and Not Recommended for Formal Inclusion as a Component of the Model:

It is important to note that no funding model can or should try to support all goals of the state's higher education system. When formulas are designed to respond to multiple goals they become overly burdensome, complicated and unproductive in achieving broader objectives and priorities. Well-designed funding models address the broader goals for higher education while allowing institutions to respond in ways that best serve their student populations and enhance their mission.

Goals Aligned with the Proposed Model or Those That Can be Enhanced Through Revisions Aligned to Best-Practice Principles

- **Access**: Increase overall enrollment and in important target populations
 - **Model Status**: Aligned. The model provides a significant incentive for increasing enrollment by allocating 70 percent of funding based on the courses attempted by West Virginia resident students. Furthermore, target populations are incentivized through additional weighting for economically disadvantaged students, academically underprepared students, adult students, and underserved racial/ethnic minority students.

- **Access:** Increase the percentage of West Virginia high school graduates continuing on to higher education
 - **Model Status:** Aligned. The model promotes the recruitment of West Virginia high school graduates by including metrics directly aligned with enrollment (enrolled credit hours) and correlated with enrollment (progression and student success) and only recognizing resident students for most metrics.
- **Success:** Increase the number of students making progress toward on-time completion
 - **Model Status:** Aligned. The model directly recognizes the need to increase on-time completion through the 30, 60, and 90 credit hour momentum milestones. Students are only able to achieve these milestones on-time if they complete at least 15 credit hours per semester.
- **Success:** Improve the outcomes of students requiring developmental education
 - **Model Status:** Aligned. Academically under-prepared students are identified as a high-risk population in the model. Credit hours attempted, momentum milestones reached, and degrees earned by these students are multiplied by 1.5.
- **Impact:** Increase the number of degrees awarded annually at the undergraduate and graduate levels overall and in needed areas
 - **Model Status:** Aligned. The model allocates 25 percent of funding based on degrees awarded, weighted by high-risk population and high-demand field factors.

Goals Not Directly Aligned with the Proposed Model or Those That Can be Enhanced Through Revisions Aligned to Best-Practice Principles

- **Success:** Increase the overall retention rate of students and in important target populations
 - **Model Status:** Partially aligned. While retention rate is not a metric in the model, the 30, 60, and 90 credit hour momentum milestones incentivize progression and

retention of students. However, this metric only applies to first-time, full-time students. Part-time students should be accounted for by making the time-limit for reaching each milestone open ended. Institutions will still have the incentive to progress students quickly, in order for the funding associated with the metrics to be gained as soon as possible. Additionally, adjusting the access category to measure completed credit hours instead of enrolled credit hours would provide an additional incentive for credit accumulation and thus improve student retention.

- **Impact:** Institutions will address regional economic needs through developing and promoting pathways to the West Virginia workforce for students and recent graduates
 - Model Status: Not aligned. The model does not include metrics directly related to job placement. Many funding models do incorporate job placement metrics; however, data availability is frequently a challenge.
- **Impact:** Increase research and development activities which contribute to West Virginia's economic growth
 - Model Status: Partially aligned. Research institutions receive additional weighting for access and success outcomes produced, however, there is no metric in the model specifically for research and development activities. Total external (non-state) research expenditures are often incorporated into funding models to promote research goals and to better differentiate the model between institutions with varied missions.
- **Impact:** Decrease the federal student loan cohort default rate at system institutions
 - Model Status: Not aligned. Currently, the model does not include metrics associated with student debt. Several states do include metrics in their models related to cost and affordability. These could be incorporated into the West Virginia model if it is determined that the data is verifiable and if it is determined institutions can directly affect the measure.

Goals Not Supported by the Proposed Model and Not Recommended for Formal Inclusion as a Component of the Model:

- **Success:** Increase the overall four- and six-year graduation rates of students and in important target populations
 - Model Status: Not aligned and not recommended. Graduation rates are not included in the model. In general, rate-based metrics should be excluded from outcomes-based models in favor of volume-based metrics. Rate-based metrics could have the unintended consequence of restricting access to only the best prepared students.
- All goals related to the reporting of planning efforts are recommended to remain excluded from the funding model. These include:
 - **Access:** Institutions will provide a plan for a comprehensive, collaborative access effort and report on the outcomes of this effort.
 - **Access:** Institutions will provide their comprehensive financial aid plan that guides institution level financial aid allocation, administration, and outreach and report on the outcomes of this plan.
 - **Success:** Institutions will provide brief summaries of academic program reviews and plans for assurance of student learning.
 - **Success:** Institutions with graduate programs will provide a summary of institutional plans to improve student outcomes and report on these efforts.
 - **Impact:** Institutions will provide a plan for how the institution and its students are engaging with external organizations to solve critical regional civic and/or social issues

Areas of Improvement/Recommendations

Overall, the proposed model is closely aligned with recognized outcomes-based funding model best practices and with the state's master plan. The model is focused on increased student success in ways not recognized in previous West Virginia funding methodologies.

There are some areas where the model approach could be strengthened to more closely align some parts of the master plan and to incorporate research and state practice-informed principles around the design and implementation of funding models intended to support student success. Below are six recommendations to consider when considering possible changes to the proposed model.

Recommendation 1: Maintain the core principles, metric categories, and high-risk student weights of the model. As currently structured, the model is closely aligned with many recognized best practices as well as many goals of the strategic plan.

Recommendation 2: Ease phase-in and avoid initial large shifts in funding by either calibrating the starting point of the model to current funding levels, or by appropriating additional funds to institutions showing initial funding decreases so they would not lose funding due to implementation.

Recommendation 3: Change the credit hour momentum milestones to incentivize progression of all students, not just first-time, full-time students. Part-time students should be accounted for by making the time-limit for reaching each milestone open ended. Institutions will still have the incentive to progress students quickly, in order for the funding associated with the metrics to be gained as soon as possible.

Recommendation 4: Further incentivize student success by using completed credit hours instead of enrolled credit hours in the access category.

Recommendation 5: Explore the possibility of including workforce and affordability metrics in the model, if the data is verifiable and if it is determined institutions can directly affect the measures.

Recommendation 6: Further account for institution's missions by excluding medical and dental school funding from model calculations. Also, explore the possibility of adding a metric for external research expenditures and varying

the weights of the access, success, and impact funding pools among institutions with different missions.