



Postsecondary Education Working Group Performance Funding Model Review

Dr. Aaron Thompson, President
Kentucky Council on Postsecondary Education
April 19, 2023



Overview

- CPE Survey Responses
 - Expected Outcomes
 - Functioning as Expected
 - Unintended Consequences
 - Recommended Adjustments
- University Model
 - Recommended Adjustments
 - Discussion Items
- KCTCS Model
 - Recommended Adjustments



CPE Survey Responses

CPE Survey Responses

- Like the survey completed by the institutions, Council staff developed responses to the following questions:
 - What outcomes did policymakers expect to achieve from adopting the funding model?
 - In what ways has the model functioned as expected? Were there any unexpected outcomes?
 - Have there been any unintended consequences?
 - What adjustments to the model are recommended?

CPE Survey Responses

Expected Outcomes

- From a review of historical Council and working group documents it is clear there were several outcomes the performance funding model was expected to achieve:
 - Address shortcomings of the previous funding method
 - Rectify funding disparities that had developed over time
 - Accelerate progress toward attainment of state goals
 - model specific goals
 - Kentucky's 60X30 goal

Expected Outcomes

Address Shortcomings

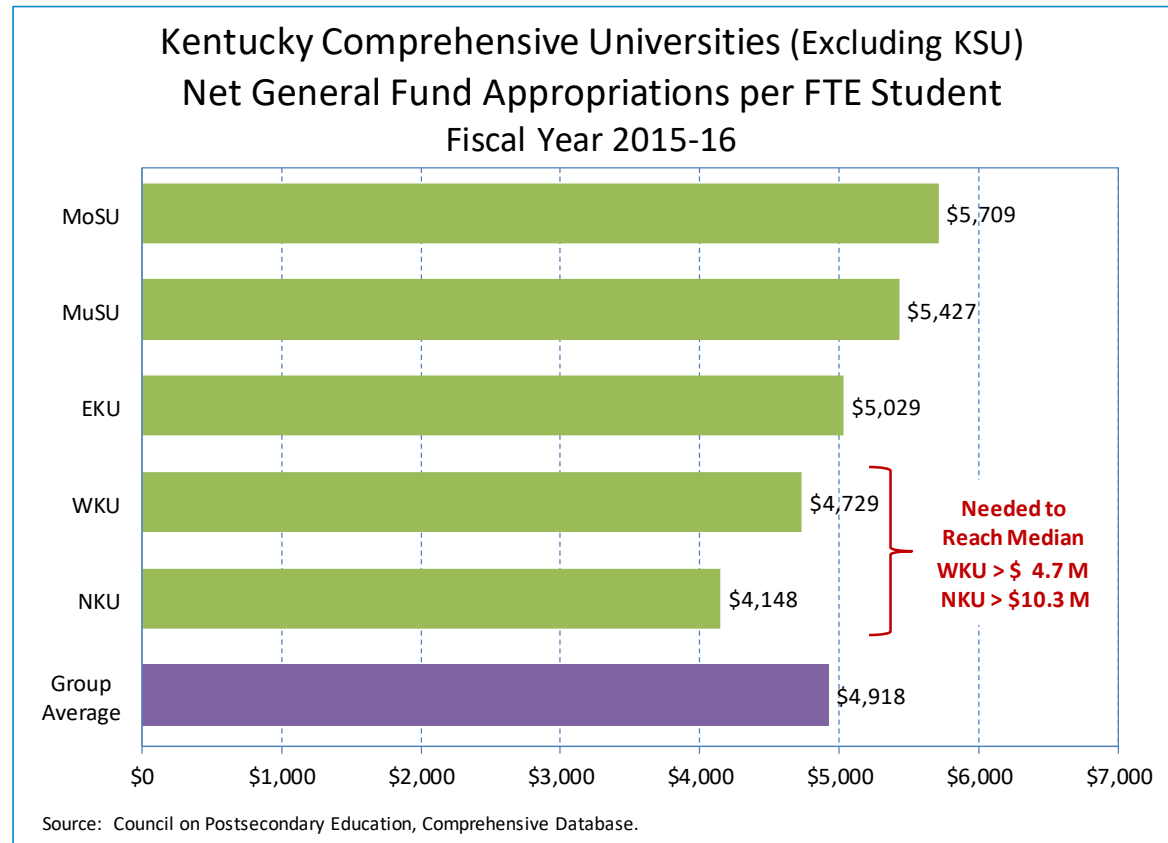
- It was anticipated that the new model would overcome shortcomings of the previous method:
 - For more than a decade, appropriations were distributed based on share of funding received the prior year
 - This approach failed to recognize changes in:
 - Enrollment
 - Program mix
 - Student outcomes (progression, degree completion)
 - There were no financial incentives for achieving desired state goals for postsecondary education

Expected Outcomes

Rectify Funding Disparities

The model was also expected to reduce funding disparities in the comprehensive sector

- In 2016, the per student funding gap between NKU and MoSU was \$1,561
- Projections showed that NKU would need \$10.3 M to reach the sector median (EKU)
- WKU would need \$4.7 M to reach the median



Expected Outcomes

Accelerate Progress

Specific goals for Kentucky's public universities listed in *Report of the Postsecondary Education Working Group* (December 1, 2016)

➤ *Model Specific Goals*

- Increase retention and progression of students toward timely bachelor's degree completion
- Increase the number of bachelor's degrees earned by all types of students
- Grow the number of bachelor's degrees produced in fields that garner higher wages upon graduation (i.e., STEM+H fields)
- Close achievement gaps by growing the number of bachelor's degrees earned by low income and minority students

Expected Outcomes

Accelerate Progress (Cont'd)

➤ *Kentucky's 60X30 Goal*

- Raise the percentage of working-age adults (ages 25 to 64) with a high-quality postsecondary degree or certificate to 60 percent by the year 2030
- Achieving this goal is critical to accelerate job creation, grow the economy, and expand the state's tax base through the contributions of a more skilled, productive workforce

CPE Survey Responses

Functioning as Expected

- Overall, the funding model has operated as expected
 - The model has addressed shortcomings of the previous base plus, base minus funding approach
 - Most funding disparities among institutions have been rectified
 - Since 2014, bachelor's degrees awarded have grown by 8% in total, 28% in STEM+H fields, and 38% among URM students
 - Kentucky is closing achievement gaps by expanding opportunity and access and growing degrees earned by URM students
 - The state is on track to achieve its 60X30 attainment goal

Functioning as Expected

Address Shortcomings

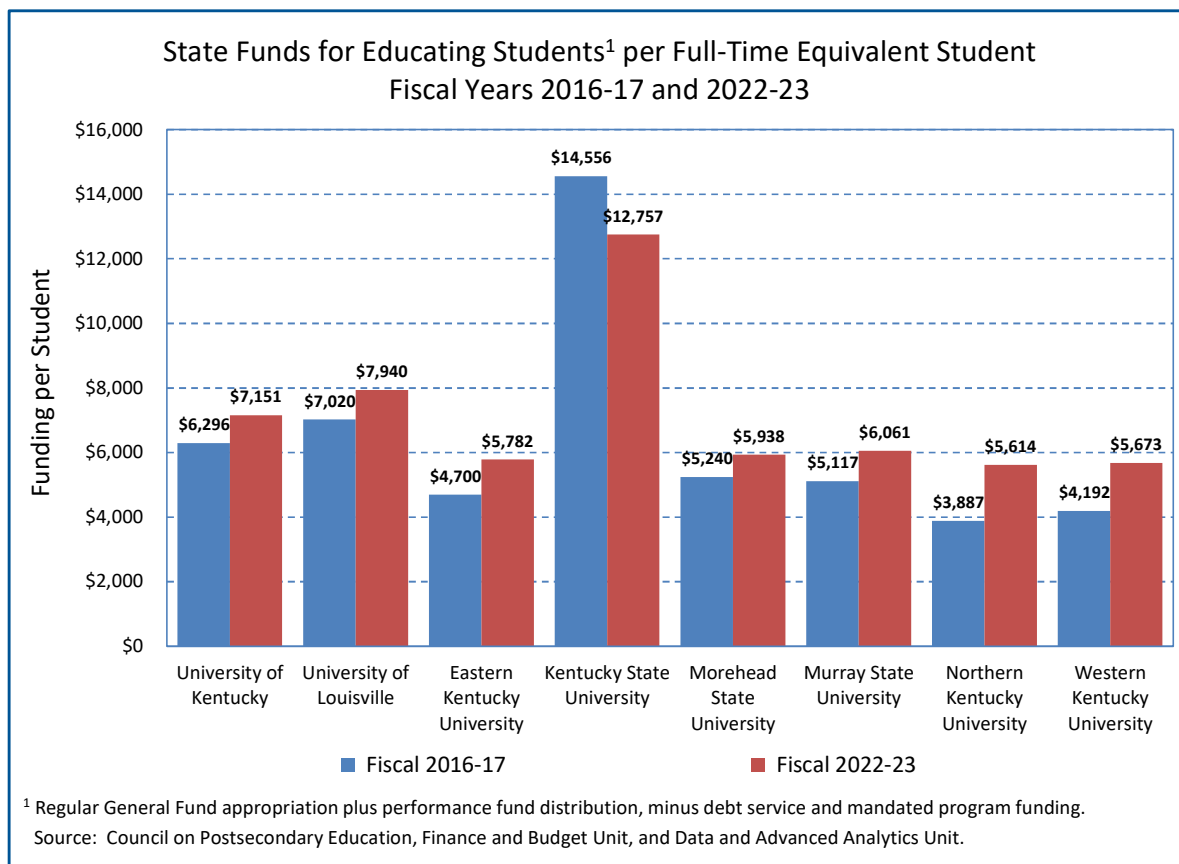
- New model has addressed limitations of the previous method
 - State funding is no longer distributed based on historical share, but on outcomes produced
 - The new approach reflects changes in enrollment, program mix, and degrees awarded
 - The model provides incentives for student progression and completion, and premiums for STEM+H, URM, and LI degrees
 - Institutions are reacting to the model strategically
 - There is increased alignment between campus and state goals
 - Many adopted budget allocation models to reward performance

Functioning as Expected

Rectify Funding Disparities

Between 2017 and 2023, state funding per student increased at every university except KSU

- As expected, most funding disparities that developed over time have been rectified
- Between 2017 and 2023, the gap in per student funding between MoSU and NKU narrowed from \$1,353 to \$324 per student
- In 2023, funding parity was achieved at 6 of 8 universities (a 7th was very close)



Functioning as Expected

Accelerate Progress

➤ *Model Specific Goals*

- As expected, Kentucky is making great strides in degree production
- Since 2014, bachelor's degrees awarded have grown by 8% overall, 28% in STEM+H fields, and 38% among URM students

Change in Bachelor's Degrees Produced by Degree Type
Between Academic Years 2013-14 and 2020-21

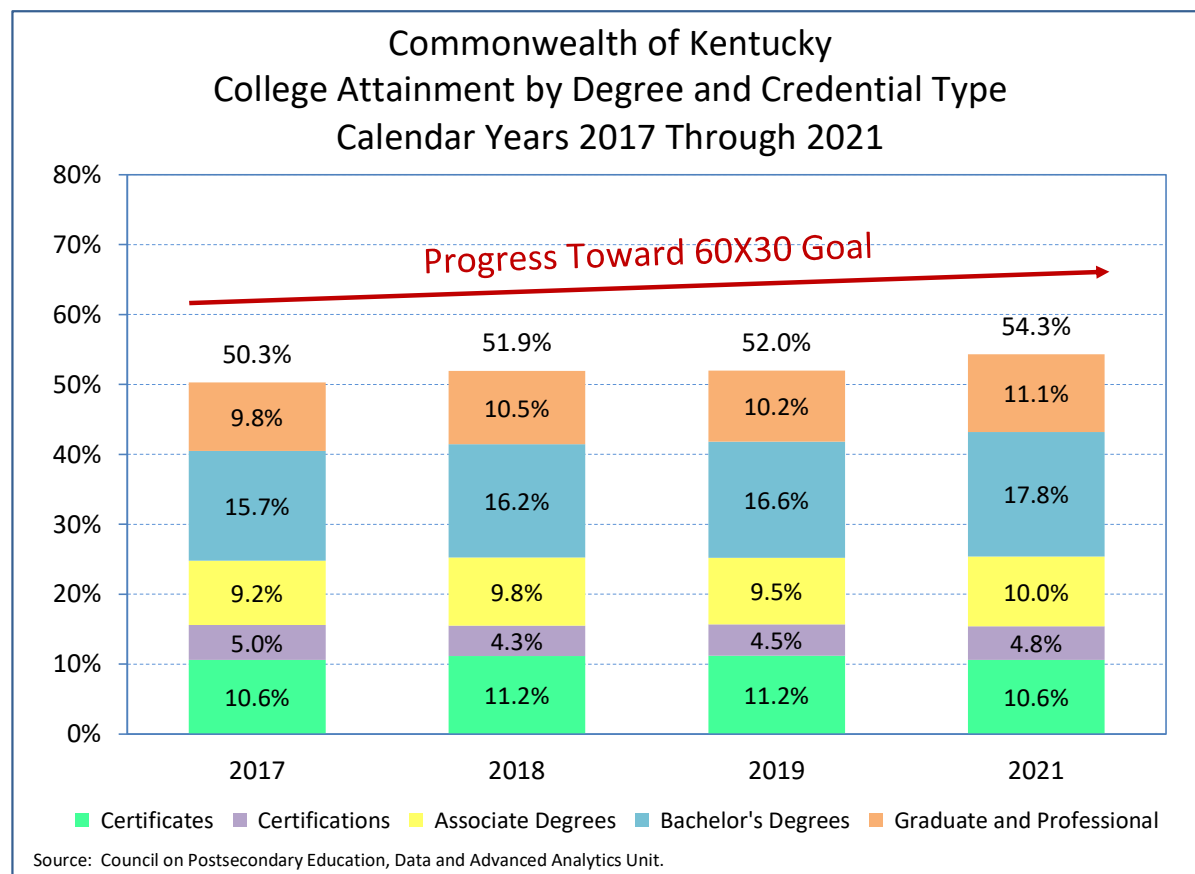
Outcome Category	2013-14	2020-21	Number Change	Percent Change	CAGR
Total Bachelor's Degrees	17,096	18,395	1,299	8%	1.1%
STEM+H Bachelor's Degrees	5,093	6,497	1,404	28%	3.5%
URM Bachelor's Degrees	1,933	2,672	739	38%	4.7%

Functioning as Expected

Accelerate Progress (Cont'd)

➤ *Kentucky's 60X30 Goal*

- Kentucky is also making good progress toward its 60X30 attainment goal
- Between 2017 and 2021, college attainment grew by 4.0 percentage points
- Mainly due to bachelor's & graduate degree growth
- The state is on track to reach its attainment goal



CPE Survey Responses

Not Operating as Expected

- There are two areas where the university funding model has not worked as intended:
 - The number of students reaching 30 credit hour and 60 credit hour progression thresholds has not increased
 - The number of bachelor's degrees awarded to low income students did not increase as expected

Not Operating as Expected *Student Progression*

➤ *Model Specific Goals*

- One unexpected outcome is a downward trend in student progression
- Since 2014, the number of students reaching 30 credit hours earned and 60 credit hours earned decreased by -17% and -9%, respectively

Change in Student Progression at 30, 60, and 90 Credit Hours Earned
Between Academic Years 2013-14 and 2020-21

Outcome Category	2013-14	2020-21	Number Change	Percent Change	CAGR
Students @30 Credit Hours	13,708	11,332	(2,376)	-17%	-2.7%
Students @60 Credit Hours	14,406	13,157	(1,249)	-9%	-1.3%
Students @90 Credit Hours	16,763	17,237	474	3%	0.4%

Not Operating as Expected

Low-Income Degrees

➤ *Model Specific Goals*

- Another area where Kentucky failed to make progress was low income degree attainment
- Between 2014 and 2021, degrees awarded to low-income students decreased by 106 or 1%
- Despite premium added for low income degrees

Kentucky Performance Funding Model					
Premiums for Low Income, STEM+H, and Minority Student Degree Production					
Fiscal Year 2022-23					
Component Category	Allocation Percent	Size of Pool	Weighted Degrees	State Funding per Degree	Funding Multiple
A Bachelor's Degrees	9.0%	\$53,713,900	24,507	\$2,192	1.0
Bachelor's Degrees				\$2,192	
B Low Income Bachelor's	3.0%	\$17,904,600	11,433	1,566	Low Income Premium
Low Income Total				\$3,758	1.7
Bachelor's Degrees				\$2,192	
C STEM+H Bachelor's	5.0%	\$29,841,000	11,433	2,610	STEM+H Premium
STEM+H Total				\$4,802	2.2
Bachelor's Degrees				\$2,192	
D Minority Bachelor's	3.0%	\$17,904,600	2,959	6,052	Minority Premium
Minority Total				\$8,244	3.8
Total Allocable Resources:		\$596,820,700			
STEM+H = Science, Technology, Engineering, Math, and Health.					

CPE Survey Responses

Unintended Consequences

- CPE staff identified two cases where operation of the funding model resulted in unintended consequences, mainly due to external circumstances
 - Lack of funding during the early years of implementation resulted in redistribution of base funds among institutions and slowed progress toward funding parity
 - Using a degree efficiency index to weight the number of bachelor's degrees produced did not operate as intended due to declining enrollment at most institutions

Unintended Consequences

Lack of Funding

- In 2016, work group members did not anticipate the longevity of state budget constraints
- During the first four years of implementation, the model was applied with *no new funding*
- Lack of state support resulted in redistribution of the General Fund base among institutions
- In 2022, Kentucky began reinvesting in higher education through the Performance Fund

Funding Models for the Universities and KCTCS Institutions
Implementation Schedule and Funding Sources
(Dollars in Millions)

<u>Timeline</u>	<u>Fiscal Year</u>	<u>Institution Contribution</u>	<u>State Funding</u>	<u>Total Funding</u> ¹
Year 0	2017-18	\$42.9	\$0.0	\$42.9
Year 1	2018-19	31.0	0.0	31.0
Year 2	2019-20	38.7	0.0	38.7
Year 3	2020-21	14.9	0.0	14.9
Year 4	2021-22	0.0	17.3	17.3
Year 5	2022-23	\$0.0	\$97.3	\$97.3

¹ Represents state appropriations, stop-loss contributions, and other campus carve outs added to the Performance Fund, which were then distributed among institutions based on outcomes produced.

Unintended Consequences

Degree Efficiency Index

- In 2016, the working group agreed to weight bachelor's degrees produced using an index of each institution's degrees per 100 FTE students divided by the sector average
- The intent was to provide an incentive for institutions to produce bachelor's degrees efficiently, but there was a perverse outcome
- The index rewards institutions that are experiencing declining enrollment and penalizes those with growing enrollment
- As such, using the efficiency index to weight bachelor's degrees runs counter to growth-oriented goals included in the model

CPE Survey Responses

Recommended Adjustments

- CPE staff recommended changes to the model:
 - Increase premium for low income bachelor's degrees
 - Add a new adult learner metric
 - Add a new workforce success metric
 - Eliminate efficiency weighting in bachelor's degree metric
 - Provide larger small school adjustment for KSU and MoSU
- CPE staff recommended changes in model application:
 - Make earned funds recurring



University Model

University Model

Recommended Adjustments

➤ *Recurring Funds*

- Make distributions from the Performance Fund recurring to allow institutions to plan for long-term use of the funds (*UK*)
- Make earned funds recurring (*CPE*)

➤ *Funding Outside Model*

- Provide additional base funding outside the model (*UofL*)
- Distribute 1/3 of new money on a proportionate basis (*MoSU*)
- Distribute a portion of available funds to the base of each institution and the remainder using formula share (*MuSU*)

University Model

Recommended Adjustments (Cont'd)

➤ *Formula Share Approach*

- Distribute 100% of available funds using formula share (*MuSU*)

➤ *Three Separate Models*

- Adopt three separate models (*EKU*)
- Recognize that a three-model approach will have the same impact on smaller institutions as the current model (*MuSU*)
- Consider adopting three models to allow for customization of metrics and weights and account for mission differences (*NKU*)
- A separate model is needed for research institutions (*WKU*)

University Model

Recommended Adjustments (Cont'd)

➤ *Sector Weighting*

- Eliminate sector weighting of FTE students, because FTE should be a “normalizing” component in the model (*EKU*)
- Remove sector weighting for all degree metrics (*MoSU*)

➤ *Small School Adjustment*

- Eliminate small school adjustment for research sector (*EKU*)
- Consider removing small school adjustment from model (*NKU*)
- Increase small school adjustment for selected institutions (*CPE*)

University Model

Recommended Adjustments (Cont'd)

➤ *Mandated Programs*

- Include inflationary adjustments for mandated programs in CPE budget requests (UK)
- Stop excluding mandated program funds from the allocable resources run through the model (UofL)
- Consider removing mandated programs from model (NKU)

➤ *Low-Income Degree Weighting*

- Increase the weighting for low-income students (UofL)
- Increase premium for low income bachelor's degrees (CPE)

University Model

Recommended Adjustments (Cont'd)

➤ *Nonresident Weighting*

- Increase the weighting of nonresident credit hours earned from 0.50 to 1.00, the same as resident students (*MuSU*)
- Weight credit hours earned by nonresident students the same as those earned by resident students (*WKU*)

➤ *Expand Degree Metrics*

- Expand degree metrics to include all degrees and credentials, which is better aligned with Kentucky's 60x30 goal (*NKU*)
- Include all degrees and credentials in the model (*WKU*)

University Model

Recommended Adjustments (Cont'd)

➤ *Efficiency Weighting*

- Eliminate productivity adjustment in bachelor's degree metric, it negatively impacts institutions with growing enrollment (*UK*)
- Eliminate efficiency weighting in bachelor's degree metric (*CPE*)

➤ *New Metrics*

- Students with disabilities should be counted in the model (*EKU*)
- Add a new adult learner metric (*CPE*)
- Add a new workforce success metric (*CPE*)

University Model

Discussion Items

- Is there consensus among working group members to recommend that earned performance funds be made recurring to institutions?
- Do work group members support the idea of using a portion of performance funds to provide base allocations outside the model?
Options:
 - Distribute one-third of new money on a proportionate basis
 - Distribute a portion of available funds to the base of each institution and the remainder using formula share
- Do work group members support the proposal to use formula share percentages to distribute a portion or all performance funds?

Discussion Item

Earned Funds Recurring

➤ *What is being proposed?*

- Make distributions from the Performance Fund recurring to institutions that earned the funds (every other year)
- Request that the General Assembly refill the fund

➤ *What is the impact?*

- This would allow institutions to use earned funds for recurring expenses and plan for long-term use
- The model would operate as intended, reflecting changes in outcomes and addressing funding disparities over time

Discussion Item

Earned Funds Recurring

Hypothetical 2023-24 Performance Fund Distribution
Scenario 5: Earned Funds Become Recurring to the Base

Additional Assumption:

- Earned funds in 2022-23 are added to the formula base and the Performance Fund is refilled with \$97.3 M

Earned Funds Are Added to the Formula Base

Institution	Baseline Fiscal 2022-23 Distribution	2022-23 Adjusted Net General Fund	Fiscal 2022-23 Distribution	Hypothetical 2023-24 Adjusted Net General Fund	Hypothetical Fiscal 2023-24 Distribution	Dollar Difference
UK	\$30,904,300	\$184,662,000	\$30,904,300	\$215,566,300	\$25,619,100	(\$5,285,200)
UofL	17,523,600	126,211,600	17,523,600	143,735,200	16,946,400	(577,200)
EKU	4,927,900	60,842,300	4,927,900	65,770,200	7,911,500	2,983,600
KSU	0	18,235,500	0	18,235,500	0	0
MoSU	0	34,931,500	0	34,931,500	3,618,000	3,618,000
MuSU	3,296,800	40,553,800	3,296,800	43,850,600	5,083,400	1,786,600
NKU	11,363,500	50,923,600	11,363,500	62,287,100	7,461,700	(3,901,800)
WKU	7,777,200	67,619,000	7,777,200	75,396,200	9,153,200	1,376,000
Sector	\$75,793,300	\$583,979,300	\$75,793,300	\$659,772,600	\$75,793,300	\$0

Discussion Item

Funding Outside the Model (5% Base Allocation)

➤ *What is being proposed?*

- Provide every university a 5.0% across-the-board base increase using funds appropriated to the Performance Fund
- Distribute remaining performance funds using **existing model**

➤ *What is the impact?*

- It would allow each institution to receive 5.0% of its adjusted net General Fund to address inflationary cost increases
- Changes in outcomes and funding disparities that developed over time would be addressed through residual distribution

Discussion Item

Funding Outside the Model (5% Base Allocation)

Hypothetical 2023-24 Performance Fund Distribution
Scenario 6: Base Increase (@ 5.0%) and Existing Model (Remainder)

Additional Assumption:

- Provide a 5.0% ATB base increase and distribute remaining available funds using the existing model

Institution	Baseline Fiscal 2022-23 Distribution	Distribute 5.0% ATB Base Increase			Distribute Remainder w/ Existing Model	Hypothetical Fiscal 2023-24 Distribution	Dollar Difference
		2023-24 Adjusted Net General Fund	5.0% Inflation Adjustment	Across-the-Board Inflation Allocation			
UK	\$30,904,300	\$184,662,000	5.0%	\$9,233,100	\$20,539,800	\$29,772,900	(\$1,131,400)
UofL	17,523,600	126,211,600	5.0%	6,310,600	10,668,000	16,978,600	(545,000)
EKU	4,927,900	60,842,300	5.0%	3,042,100	1,727,300	4,769,400	(158,500)
KSU	0	18,235,500	5.0%	911,800	0	911,800	911,800
MoSU	0	34,931,500	5.0%	1,746,600	0	1,746,600	1,746,600
MuSU	3,296,800	40,553,800	5.0%	2,027,700	1,240,300	3,268,000	(28,800)
NKU	11,363,500	50,923,600	5.0%	2,546,200	8,344,700	10,890,900	(472,600)
WKU	7,777,200	67,619,000	5.0%	3,381,000	4,074,100	7,455,100	(322,100)
Sector	\$75,793,300	\$583,979,300		\$29,199,100	\$46,594,200	\$75,793,300	\$0

Discussion Item

Funding Outside the Model (\$3.0 M Base Allocation)

➤ *What is being proposed?*

- Provide every university a \$3.0 million base increase using funds appropriated to the Performance Fund
- Distribute remaining performance funds using **formula share**

➤ *What is the impact?*

- It would allow each institution to receive \$3.0 million to address inflationary cost increases
- Although changes in outcomes would be reflected in formula share percentages, funding disparities could grow over time

Discussion Item

Funding Outside the Model (\$3.0 M Base Allocation)

Funding Model for the Public Universities
Hypothetical 2023-24 Performance Fund Distribution
Scenario 7: Base Allocation (@\$3.0 M) and Formula Share (Residual)

Additional Assumption:

- Provide each university \$3.0 million base allocation and distribute residual funds using formula share

Institution	A	Distribute Funds Using Formula Share				B	(B - A)
	Baseline Fiscal 2022-23 Distribution	Fixed Base Allocation	Fiscal 2023-24 Formula Totals	Formula Share %	Hypothetical Formula Share Distribution	Hypothetical Fiscal 2023-24 Distribution	Dollar Difference
UK	\$30,904,300	\$3,000,000	\$175,630,300	33.3%	\$17,231,900	\$20,231,900	(\$10,672,400)
UofL	17,523,600	3,000,000	116,172,100	22.0%	11,398,300	14,398,300	(3,125,300)
EKU	4,927,900	3,000,000	54,236,000	10.3%	5,321,400	8,321,400	3,393,500
KSU	0	3,000,000	6,376,400	1.2%	625,600	3,625,600	3,625,600
MoSU	0	3,000,000	26,713,000	5.1%	2,621,000	5,621,000	5,621,000
MuSU	3,296,800	3,000,000	34,848,300	6.6%	3,419,200	6,419,200	3,122,400
NKU	11,363,500	3,000,000	51,155,200	9.7%	5,019,100	8,019,100	(3,344,400)
WKU	7,777,200	3,000,000	62,750,100	11.9%	6,156,800	9,156,800	1,379,600
Sector	\$75,793,300	\$24,000,000	\$527,881,400	100.0%	\$51,793,300	\$75,793,300	\$0

Discussion Item

Formula Share Approach (@ 100%)

➤ *What is being proposed?*

- Run model to determine formula totals (Column D, Table 3)
- Calculate each institution's percent of total of that distribution
- Distribute 100% of available funds based on that formula share

➤ *What is the impact?*

- It would allow every institution to receive a share of funds regardless of changes in outcomes or hold harmless allocations
- Changes in outcomes would be reflected in formula share percentages, but disparities in funding could grow over time

Discussion Item

Formula Share Approach (@ 100%)

Hypothetical 2023-24 Performance Fund Distribution
Scenario 2: Formula Share Approach (@ 100%)

Additional Assumption:

- Distribute 100% of available university funds using formula share percentages

Distribute Funds Using Formula Share					
Institution	Baseline Fiscal 2022-23 Distribution	Fiscal 2023-24 Formula Totals	Formula Share %	Hypothetical Fiscal 2023-24 Distribution	Dollar Difference
UK	\$30,904,300	\$175,630,300	33.3%	\$25,217,000	(\$5,687,300)
UofL	17,523,600	116,172,100	22.0%	16,680,000	(843,600)
EKU	4,927,900	54,236,000	10.3%	7,787,200	2,859,300
KSU	0	6,376,400	1.2%	915,500	915,500
MoSU	0	26,713,000	5.1%	3,835,500	3,835,500
MuSU	3,296,800	34,848,300	6.6%	5,003,500	1,706,700
NKU	11,363,500	51,155,200	9.7%	7,344,900	(4,018,600)
WKU	7,777,200	62,750,100	11.9%	9,009,700	1,232,500
Sector	\$75,793,300	\$527,881,400	100.0%	\$75,793,300	\$0

Discussion Item

Formula Share Approach (@ 33.3%)

➤ *What is being proposed?*

- Run model to determine formula totals (Column D, Table 3)
- Calculate each institution's percent of total of that distribution
- Distribute 33% of available funds based on formula share and 67% based on **existing model**

➤ *What is the impact?*

- It would allow every institution to receive a share of funds regardless of changes in outcomes or hold harmless allocations
- Changes in outcomes and funding disparities that developed over time would be addressed through residual distribution

Discussion Item

Formula Share Approach (@ 33.3%)

Hypothetical 2023-24 Performance Fund Distribution
Scenario 3: Formula Share (33.3%) and Existing Model (66.7%)

Additional Assumption:

- Distribute one-third of available university funds using formula share and two-thirds using the existing model

Institution	Baseline Fiscal 2022-23 Distribution	Distribute Funds Using Formula Share			Distribute Funds Using Existing Model	Hypothetical Fiscal 2023-24 Distribution	Dollar Difference
		Fiscal 2023-24 Formula Totals	Formula Share %	Hypothetical Formula Share Distribution			
UK	\$30,904,300	\$175,630,300	33.3%	\$8,405,700	\$21,936,400	\$30,342,100	(\$562,200)
UofL	17,523,600	116,172,100	22.0%	5,560,000	11,591,800	17,151,800	(371,800)
EKU	4,927,900	54,236,000	10.3%	2,595,700	2,158,600	4,754,300	(173,600)
KSU	0	6,376,400	1.2%	305,200	0	305,200	305,200
MoSU	0	26,713,000	5.1%	1,278,500	0	1,278,500	1,278,500
MuSU	3,296,800	34,848,300	6.6%	1,667,800	1,517,400	3,185,200	(111,600)
NKU	11,363,500	51,155,200	9.7%	2,448,300	8,751,500	11,199,800	(163,700)
WKU	7,777,200	62,750,100	11.9%	3,003,200	4,573,200	7,576,400	(200,800)
Sector	\$75,793,300	\$527,881,400	100.0%	\$25,264,400	\$50,528,900	\$75,793,300	\$0



KCTCS Model

Funding Model Review

KCTCS Recommended Adjustments

- Use a three-year average on all metrics except square footage to smooth economic and population change impacts
- Allow earned funds to become part of an institution's base
- Promote equity by accounting for regional differences
 - Modify the equity adjustment based on Community Needs Index that considers local unemployment, labor force participation, and poverty rates

Funding Model Review

KCTCS Recommended Adjustments (Cont'd)

- Reduce the weighting of the progression metrics (from 12% to 7%) to reflect the shorter time retention of a KCTCS student as they complete a short-term credential
- Merge STEM+H, High-Wage High-Demand, and Targeted Industry credentials within the overall credential calculation
- Reduce the weighting of the credential metric (from 15% to 8%) to allow increased focus on URM, under-prepared, low income, and transfer students

Funding Model Review

KCTCS Recommended Adjustments (Cont'd)

- Add a metric for adult learners
- Possibly add an additional metric that compares a college's current year performance to its previous year performance
 - To incentivize and allow all colleges to potentially receive a performance distribution



Next Steps

Next Steps

- Fiscal 2023-24 Performance Distribution
 - Run model and complete validation process
 - Analyze results and share with working group
- University Model
 - Run additional scenarios as needed
 - Continue discussion and reach consensus on proposed changes
- KCTCS Model
 - Run scenarios as needed
 - Continue discussion and reach consensus on proposed changes

Questions?



Twitter: CPENews and CPEPres



Website: <http://cpe.ky.gov>



Facebook: KYCPE

