AGENDA
Performance Funding Work Group Meeting
July 19, 2016

Time: 1:00 PM – 4:00 PM EST
Location: CPE, Conference Room A
Dial In: (866) 754-7476
Participant Code: 1589321673

I. Opening Remarks

II. Model Development Timeline

III. Goal and Guiding Principles

IV. Discussions to Date
   A. Areas of General Agreement
   B. Remaining Decision Points

V. Sample Models
   A. Targets and Goals Approach
      - CPE Proposal (2016-18 Budget Request)
   B. Relative Improvement Model
      - Senate Budget Proposal (HB 303 SCS1)
   C. Outcomes-Based Funding
      - Sample Research Sector Model
      - Volume-Driven Approach

VI. Aligning Metrics and Goals
   A. State Goals for Postsecondary Education
   B. Potential Metrics

VII. Decision Point Discussion

VIII. Next Steps

Performance Funding Work Group

Meeting #1 - July 19, 2016

Agenda – July 19, 2016

1. Opening Remarks & State Strategic Plan Overview
2. Model Development Timeline
3. Goal & Guiding Principles
4. Discussions to Date
    a. Areas of General Agreement
    b. Remaining Decision Points
5. Sample Models
    a. Targets & Goals Approach
    b. Relative Improvement Model
    c. Outcomes-Based Funding
6. Aligning Metrics with Goals
    a. State Goals for Postsecondary Education
    b. Potential Metrics
7. Decision Point Discussion
8. Next Steps

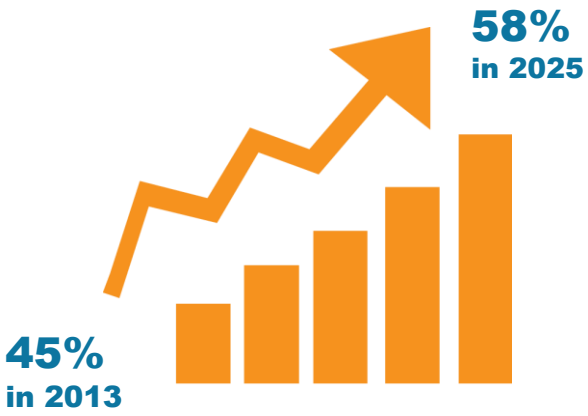
A PLAN TO CREATE A MORE EDUCATED AND PROSPEROUS KENTUCKY

2016-2021 STRATEGIC AGENDA FOR POSTSECONDARY AND ADULT EDUCATION

Lee Nimocks
Vice President for Policy, Planning & External Relations

The Big Goal

- To increase KY's educational attainment (certificate and above) to **58% by 2025.**
- KY's current attainment level for working age adults is **45%.**



- Developed in consultation with the National Center on Higher Education Management Systems (NCHEMS).
- Based on HB 1 (1997) goal to achieve "a standard of living and quality of life that meets or exceeds the national average," to be "accomplished through increased educational attainment at all levels."

The Benefits of Higher Levels of Educational Attainment

- Higher per capital income and lower poverty rates
- Accelerated job growth
- Increased tax revenue through the contributions of a skilled, productive workforce
- Better health
- More informed, engaged citizens
- A more creative, entrepreneurial culture and economy

3 PRIORITY AREAS

OPPORTUNITY. How can Kentucky encourage more people to take advantage of postsecondary opportunities?

SUCCESS. How can Kentucky increase degree and certificate completion, fill workforce shortages, and guide more graduates to a career path?

IMPACT. How can Kentucky's postsecondary system create economic growth and development and make our state more prosperous?

OPPORTUNITY

Objective 1: Improve the diversity and inclusiveness of Kentucky's campuses through the statewide diversity planning process and related initiatives.

Objective 2: Partner with Kentucky's P-12 system to increase the number of students ready to enter a postsecondary degree or certification program.

Objective 3: Increase participation in postsecondary education, particularly among traditionally underserved populations.

Objective 4: Improve the education and skill levels of Kentucky Adult Education students to prepare them for careers and/or postsecondary education.

Objective 5: Expand financial access to postsecondary education.

SUCCESS

Objective 6: Increase persistence and timely completion for all students at all levels, particularly for low-income and underrepresented minority students.

Objective 7: Increase the number of KCTCS students who successfully transfer to 4-year institutions.

Objective 8: Promote academic excellence through improvements in teaching and learning.

IMPACT

Objective 9: Improve the career readiness of postsecondary education graduates.

Objective 10: Increase basic, applied, and translational research to create new knowledge, accelerate innovation, and promote economic growth.

Objective 11: Expand regional partnerships, outreach and public service that improve the health and quality of life of Kentucky communities.

MEASURING PROGRESS

- Draft institutional and state-level metrics have been developed to measure progress on each objective.
- The performance funding model presented to the 2016 General Assembly included a subset of those metrics.
- The strategic agenda metrics and accountability system will be finalized at the conclusion of the performance funding development process so all performance measures are aligned.

Performance Funding Model Development

CPE, Finance & Administration

Bill Payne, Vice President

Scott Boelscher, Sr. Associate

Kentucky Experience with Performance Funding

The Council has recommended three different approaches over the past three biennia, all dependent on new funding:

1) 2012-14 Performance Funding for Student Success
   - Targets and Goals Approach
   - Four metrics (degrees, graduation rate, achievement gaps, transfer)

2) 2014-16 Degree Production Fund
   - Outcomes-Based Funding
   - One metric (degrees produced)

3) 2016-18 Performance Funding
   - Targets and Goals Approach
   - Eight metrics (degrees and credentials, retention rate, progression, college readiness, graduation rate, achievement gaps, sector specific, and campus specific)

Where We Are Today

- The Kentucky General Assembly determined that there is need for development of a funding model that aligns the Commonwealth's investment in postsecondary education with state policy goals and objectives.

- The enacted 2016-18 Budget of the Commonwealth (HB 303) directs CPE to establish a working group comprised of:
  - the president of the Council;
  - the president of each university and KCTCS (or their representative);
  - the Governor (or his representative);
  - the Speaker of the House (or his representative); and
  - the President of the Senate (or his representative).

- For the purpose of developing a funding model for the allocation of state appropriations for campus operations, that incorporates elements of performance, mission, and enrollment.

Where We Are Today (Cont'd)

- The model shall include metrics that align with HB 1 goals, with appropriate differentiation that reflects missions of the research universities, comprehensive universities, and community and technical colleges.
- The working group shall complete its work and provide a report setting forth its recommendations to the Governor and Interim Joint Committee on Education no later than December 1, 2016.
- If authorized, funding model calculations will be used to distribute $42.9 million in appropriations transferred from campus base budgets to a Postsecondary Education Performance Fund in 2017-18.
- It is anticipated that model calculations will serve as a basis for future biennial budget requests developed by the Council.

Model Development Timeline

- July Meeting
  - Work group endorsement of goal and guiding principles.
  - Reach agreement on model type and components.
  - Discuss approach regarding sector differentiation.
  - Review and discuss metrics and weights.
- September Meeting
  - Achieve consensus on approach for sector differentiation.
  - Reach agreement on metrics and weights.
- November Meeting
  - Work group endorsement of final model.
  - Review and edit draft report to Governor and IJCE.

Goal and Guiding Principles

Goal

- Develop a funding model that aligns state funding for higher education operations with desired state policy goals and appropriately reflects mission differentiation among campuses.

Guiding Principles

- Mission Sensitive - recognition that dissimilar missions may require dissimilar levels of funding.
- Outcomes Based - model should provide performance incentives by establishing a link between funding and desired state outcomes.
- Completion Driven - consider cost implications of differences in levels of credit hours earned, residency status, and program mix.
- Easily Communicated - few metrics; approach easy to understand.

Goal and Guiding Principles (Cont'd)

Guiding Principles (Cont'd)

- Sustainable - provides continuing incentives for improvement regardless of resource environment *(cuts, flat funding, or growth).*
- Reasonably Stable - will not permit large annual shifts in funding.
- Data Driven - uses data that are reliable and readily available.
- Compatible - capable of being integrated into CPE biennial budget requests; allows funding requests outside the model *(trust funds).*
- Relevant - excludes mandated programs and other activities that are not credit hour generating.
- Flexible - continuing provision of lump sum appropriations, with appropriate accountability requirements.

Discussions to Date

Areas of General Agreement

- Should performance funding be phased in? **YES**
- Should KSU be held harmless in early years of implementation? **YES**
- Should mandated programs be excluded from allocable funds? **YES**

Remaining Decision Points

- Should the adopted model preserve sector shares?
- Should the metrics be customized by sector?
- What percentage of postsecondary institution net General Fund should be distributed on the basis of performance?
  - 5.0% in 2017-18 *(specified in HB 303)*
  - Going forward?

Discussions to Date (Cont'd)

Remaining Decision Points (Cont'd)

- If the percentage distributed based on performance increases going forward, what source of funds should provide the increase?
  - Existing Base?
  - New Appropriations?
  - Blend of the two *(matching arrangement)*?
- What is the preferred approach for distributing funding based on performance?
  - Targets and Goals Approach
  - Relative Improvement Model
  - Outcomes-Based Funding
- Should distributed funds be recurring or nonrecurring? If recurring, how is performance pool refilled? If NR, how is growth funded?

Discussions to Date (Cont'd)

Remaining Decision Points (Cont'd)

- Regardless of the approach adopted, which components should be included?
  - Course completion?
  - Progression and degree completion?
  - Both? What percentage of each component?
- What metrics should be included in the model?
  - Those agreed upon as part of CPE's 2016-18 budget request?
  - Other metrics?
- What weight should be assigned to each metric?
- Should the metrics include both volume and rate measures?

Sample Models

Targets and Goals Approach

Characteristics

- More effective when predicated on provision of new appropriations.
- Reliance on new funds subjects approach to vagaries of budget.
- Not all designated funds are distributed *(ongoing issue regarding treatment of unearned funds)*.
- Requires setting of goals *(contentious and somewhat subjective)*.
- Targets can‘t anticipate future unforeseen factors *(a post-recession enrollment decline could make it impossible to reach goals).*
- Rewards future performance *(not production already achieved)*.
- Campuses compete against targets to earn funds *(not each other)*.
- Institutions must improve to receive funding.

Target and Goals Approach
CPE Proposal (2016-18 Budget Request)

Request Features

- $43.4 million request in 2016-17 and $86.7 million in 2017-18.
- Appropriated to institutions in advance of performance, but had to be earned to become recurring in next biennium.
- Allocated based on share of system total budget cuts *($86.7 million request in the 2nd year represented 50% of cuts since 2007-08)*.
- CPE and campuses agreed on seven metrics *(i.e., five student success measures, one sector specific, and one campus specific metric)*.
- Funds distributed based on percent of goals attained *(if a campus achieved 75% of its goals, it would retain 75% of appropriated funds)*.
- Earned funds would have become recurring to campus budgets.
- Included opportunity to access unearned funds in next biennium.

Target and Goals Approach
CPE Proposal (2016-18 Budget Request)

Steps in Calculation

- Identify beginning base for each metric
  (3-year average data + most recent year of data ÷ 2)
- Set two-year change goal for each metric
  (using trend data, campus strategic plans, IPEDS peers data)
- In 2nd year, measure two-year actual performance
- Calculate percent of goal attained for each metric
  (actual change ÷ goal)
- Sum point values for each metric to determine composite score
- Divide by total possible points to calculate distribution

Target and Goals Approach

CPE Proposal (2016-18 Budget Request)

Assessment Method

Performance Metric	Two-Year Change Goal	Actual Two-Year Change	Percent of Goal Attained	Point Value
Baccalaureate Degrees	400	200	50%	0.50
Retention Rate	5.5 ppt	5.5 ppt	100%	1.00
Graduation Rate	5.0 ppt	4.0 ppt	80%	0.80
Student Progression	1,120	784	70%	0.70
Closing Achievement Gaps	60	30	50%	0.50
			Composite Point Score:	3.50
			Total Possible Points: ÷	5.00
			Proportion Earned:	70%

ppt = percentage point change

In this example, 70% of allocated performance funds would become recurring in 2018-20.

Relative Improvement Model

Characteristics

- Can be funded with new appropriations or a portion of the base.
- Not all designated funds are distributed *(ongoing issue regarding treatment of unearned funds)*.
- Does not require setting of targets or goals *(distribution determined based on combination of institution improvement score compared to beginning base and distance from highest score within sector).*
- Considers both current and future production in improvement score.
- Campuses compete against each other to record highest improvement score within sector *(only one campus within sector eligible to receive 100% of designated funds due to ranking scheme).*
- Performance does not have to improve for funds to be distributed.

Relative Improvement Model
Senate Budget Proposal (HB 303 SCS1)

Proposal Features

- 25% of net General Fund in fiscal 2017-18 would have been distributed based on performance within sectors.
  - Research; Comprehensive; and KCTCS.
- Five Metrics:
  - Degrees and Credentials
  - Retention Rates
  - Progression
  - Graduation Rates
  - Sector-Specific Metrics:
    - Research expenditures (UK; UofL)
    - STEM+H degrees as a percent of all degrees (Comps)
    - Workforce training hours; transfers with associates (KCTCS)

Relative Improvement Model
Senate Budget Proposal (HB 303 SCS1)

Steps in Calculation

- Calculate metric scores *(Percent improvement for the two most recent academic years compared to the four preceding years, expressed as a ratio)*.
- Sum metric scores to determine total improvement score.
- Divide each institution's total improvement score by the high score for the sector *(to determine percentage of high score)*.
- Multiply each institution's percentage of high score by its performance allocation to determine distribution amount *(tentative 2017-18 allocation → 25% of General Fund base)*.

Relative Improvement Model
Senate Budget Proposal (HB 303 SCS1)

Assessment Method

	A	B	C	D = B / C	E = A x D
Campus	2017-18 Performance Allocation	Total Improvement Score	Sector High Score	Percent of Sector Maximum	Performance Distribution
1	$10,000,000	5.2	5.5	95%	$9,454,545
2	15,000,000	4.8	5.5	87%	13,090,909
3	20,000,000	5.5	5.5	100%	20,000,000
4	17,500,000	5.0	5.5	91%	15,909,091
Sector	$62,500,000				$58,454,545

Outcomes-Based Funding

Characteristics

- Typically designates a portion of base funding as performance pool.
- Stable fund source can provide ongoing incentive for improvement.
- 100% of designated funds are distributed *(no unearned funds).*
- Does not require setting of targets or goals *(distribution determined by relative campus share of sector total outcomes produced).*
- Considers and rewards what campuses are already producing and increased production *(funding not linked to future production only)*.
- Campuses compete against each other for share of funds based on relative production of desired state outcomes.
- Performance need not improve for funds to be distributed, but there are incentives for campus officials to focus on improving outcomes.

Outcomes-Based Funding
Sample Research Sector Model

Steps in Calculation

- Subtract mandated programs from net General Fund and apply designated percentage to determine allocable resources.
- Assign allocable resources to model components for each campus *(e.g., 20% course completion and 5% progression and degree completion)*
- Divide each institution's weighted credit hours earned by sector total credit hours earned to determine course completion share.
- Apply share percentage to sector total course completion pool to determine distribution amount.
- Divide each institution's weighted outcomes by sector total outcomes to determine progression and degree completion share.

Outcomes-Based Funding
Sample Research Sector Model

Steps in Calculation (Cont'd)

- Apply share percentage to sector total progression and degree completion pool to determine distribution amount.
- Sum course completion and progression and degree completion distribution amounts to determine total outcomes distribution amount for each institution.
- Apply any agreed upon hold harmless or stop loss provisions to prevent large shifts in funding from occurring.

Assessment Method

(see separate handouts)

Outcomes-Based Funding
Volume-Driven Approach

Characteristics

- Relies primarily on volume of outcomes produced, not rates.
- Does not contain either graduation rates or retention rates (assumption that production related to these metrics included in degree completion and progression volumes)
- Would include metrics such as:
  - Degree Completion (baccalaureate degrees; STEM+H weight)
  - Educational Opportunity (low income and URM student degrees)
  - Progression (at 30, 60, and 90 credit hour thresholds)
  - Degree Productivity (degrees per 100 FTE)
  - Research/ Public Service

Aligning Metrics and Goals

Aligning Metrics and Goals
Potential Metrics

KCTCS

- Credentials Awarded ▲
- Retention Rate (1st to 2nd year) ▲
- Graduation Rate (3-year) ▲ ●
- College Readiness Success
  - Complete English course (by 2nd fall)
  - Complete Math course (by 2nd fall)
- Workforce Training
- Transfers with Associates

Universities

- Baccalaureate Degrees ▲
- Retention Rate (1st to 2nd Year) ▲
- Progression ▲
- Graduation Rate (6-Year) ▲ ●
- Sector Specific
  - UK&UL: Research Expenditures
  - Comps: STEM+H Degrees
- Institution Specific

▲ Includes components related to closing achievement gaps for underrepresented minority and low-income students.

● Graduation rate will be included as a metric in the 2016-18 biennium, but not assigned any weight until 2018-20.

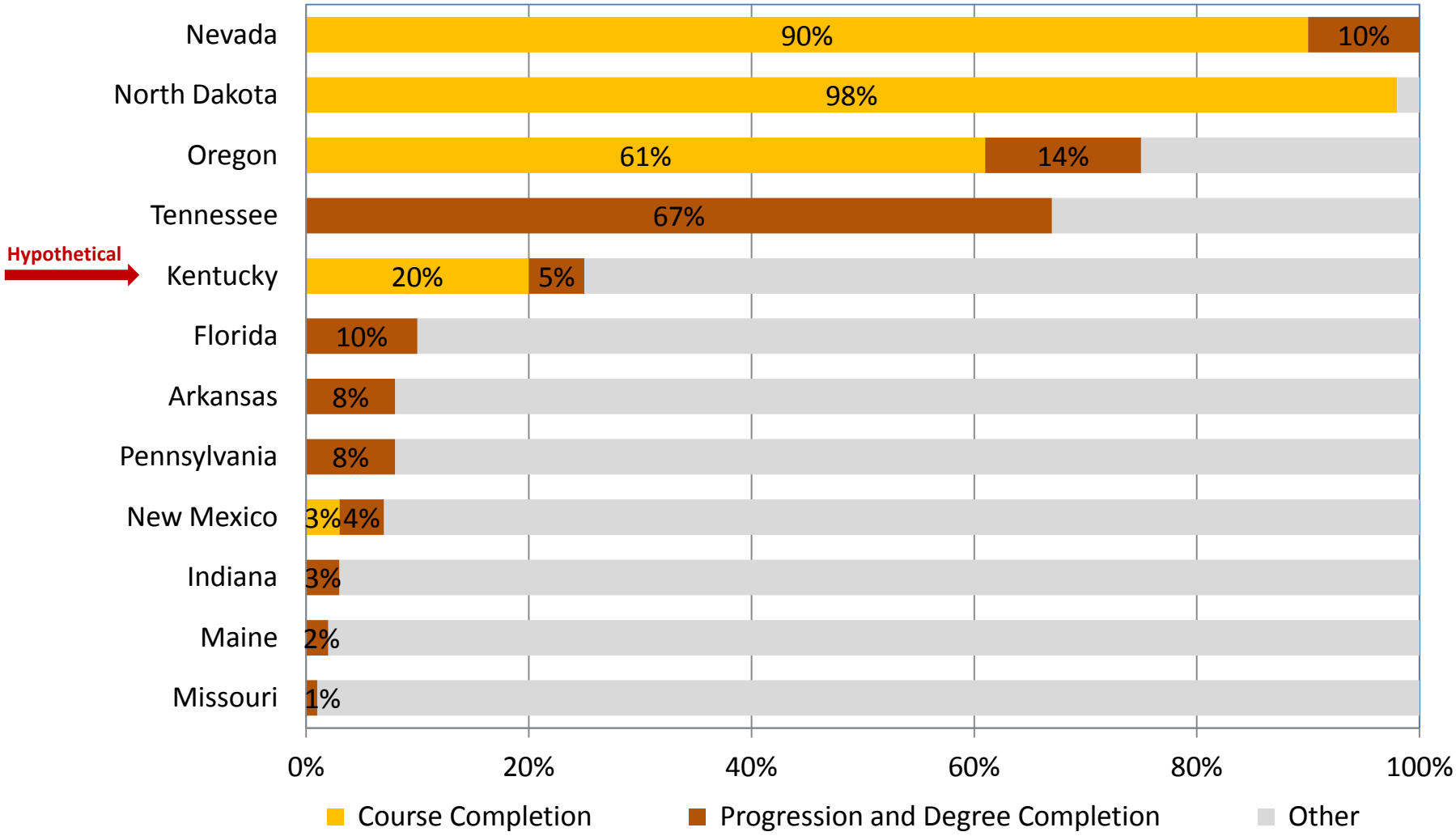
Next Steps

Performance Funding Work Group

Next Meeting Sept. 7, 2016

Attachment 1

Outcomes-Based Funding in Four-Year Sector
As a Percentage of Overall State Support
July 19, 2016



Source: Snyder and Fox (2016), HCM Strategists, *Driving Better Outcomes: Fiscal Year 2016 State Status & Typology Update*.

Attachment 2

Kentucky Public Postsecondary Education System
Adjusted Net General Fund Appropriations by Institution and Sector
July 13, 2016

Institution/ Sector	2017-18 Net General Fund	Est. 2017-18 Mandated Programs	2017-18 Adjusted Net General Fund
University of Kentucky	$267,028,800	($80,323,000)	$186,705,800
University of Louisville	132,818,400	0	132,818,400
Research Sector	$399,847,200	($80,323,000)	$319,524,200
Eastern Kentucky University	$64,972,300	($200,000)	$64,772,300
Kentucky State University	26,729,600	(6,736,000)	19,993,600
Morehead State University	41,969,200	(2,880,000)	39,089,200
Murray State University	45,864,000	(2,644,700)	43,219,300
Northern Kentucky University	51,447,600	(1,500,000)	49,947,600
Western Kentucky University	74,511,700	(5,594,600)	68,917,100
Comprehensive Sector	$305,494,400	($19,555,300)	$285,939,100
KCTCS	$181,605,000	($13,204,100)	$168,400,900
Postsecondary System	$886,946,600	($113,082,400)	$773,864,200

Council on Postsecondary Education
Sample Funding Model for Kentucky's Research University Sector
Containing Course Completion and Progression and Degree Completion Components

Attachment 3
July 7, 2016

Draft - For Discussion Purposes Only

Scenario 3: Contribution Level @ **25.0%** of Adjusted Net General Fund

		Course Completion					Progression & Degree Completion					Total Outcomes				
Campus	2017-18 Adjusted Net General Fund	Contributed Amounts @ **20.0%**	Percent of Total	Formula Amounts	Percent of Total	Difference	Contributed Amounts @ **5.0%**	Percent of Total	Formula Amounts	Percent of Total	Difference	Contributed Totals	Percent of Total	Formula Totals	Percent of Total	Difference
UK	186,705,800	37,341,200	58.4%	36,873,000	57.7%	(468,200)	9,335,300	58.4%	9,850,900	61.7%	515,600	46,676,500	58.4%	46,723,900	58.5%	47,400
UofL	132,818,400	26,563,700	41.6%	27,031,900	42.3%	468,200	6,640,900	41.6%	6,125,300	38.3%	(515,600)	33,204,600	41.6%	33,157,200	41.5%	(47,400)
Sector	319,524,200	63,904,900	100.0%	63,904,900	100.0%	0	15,976,200	100.0%	15,976,200	100.0%	0	79,881,100	100.0%	79,881,100	100.0%	0

	2017-18 Adjusted Net General Fund	Formula Difference	Percent of NGF Base
UK	186,705,800	47,400	0.03%
UofL	132,818,400	(47,400)	-0.04%
Sector	319,524,200	0	

Council on Postsecondary Education
Sample Funding Model for the Research University Sector
Distribution of Course Completion Component
Average Weighted Student Credit Hours Earned (Fiscal Years 2013, 2014, and 2015)

Draft - For Discussion Purposes Only

Attachment 4
July 7, 2016

Research Sector Universities			Lower Division	Upper Division	Master's	Other Graduate	Doctor's Research	Doctor's Professional	Total
University of Kentucky	Resident SCH Earned	Liberal Arts, Math, Social Sciences, Languages, Other Cluster	204,452	138,440	21,799	2,489	635	13,544	381,359
		Basic Skills Cluster	3,501	3,351	6	0	0	11	6,868
		Business Cluster	12,660	81,331	48,752	360	3,808	2,744	149,653
		Education	12,055	34,975	10,415	4,009	19	13,600	75,073
		Service Cluster	16,029	22,322	2,814	313	0	1,277	42,753
		Visual and Performing Arts Cluster	42,493	29,465	3,131	318	0	1,987	77,395
		Trades and Tech Cluster	1,237	1,015	0	0	0	0	2,252
		Sciences Cluster	197,110	102,447	10,716	1,600	22,813	11,328	346,013
		Law Cluster	0	304	6	92	76,620	29	77,052
		Engineering/Architecture Cluster	29,891	98,720	8,898	287	0	2,398	140,194
		Health Cluster	11,750	20,617	62,101	3,388	348,144	6,718	452,718
		Nursing	1,869	15,411	93	1,796	18,902	2,698	40,770
		Other - CIP code unknown or not included in model	4,154	16,715	1,416	0	3,385	0	25,670
		Subtotal	537,201	565,112	170,146	14,651	474,326	56,334	1,817,770
	Nonresident SCH Earned	Liberal Arts, Math, Social Sciences, Languages, Other Cluster	42,154	20,893	8,496	606	59	17,519	89,726
		Basic Skills Cluster	942	609	4	0	0	25	1,580
		Business Cluster	2,627	13,742	5,867	30	438	3,863	26,567
		Education	2,037	4,429	1,336	359	3	3,627	11,790
		Service Cluster	3,125	3,810	2,131	61	0	951	10,078
		Visual and Performing Arts Cluster	8,379	5,849	1,854	20	0	3,261	19,364
		Trades and Tech Cluster	201	224	0	0	0	0	426
		Sciences Cluster	39,373	18,879	6,710	175	2,517	16,275	83,930
		Law Cluster	0	54	0	28	11,835	0	11,917
		Engineering/Architecture Cluster	3,677	10,924	3,001	42	0	4,461	22,105
		Health Cluster	2,448	3,487	15,292	569	50,897	7,010	79,704
		Nursing	469	2,914	0	198	875	217	4,674
		Other - CIP code unknown or not included in model	745	2,629	254	0	201	4	3,834
		Subtotal	106,177	88,446	44,945	2,088	66,826	57,214	365,696
	Reciprocity SCH Earned	Liberal Arts, Math, Social Sciences, Languages, Other Cluster	0	0	0	0	0	0	0
		Basic Skills Cluster	0	0	0	0	0	0	0
		Business Cluster	0	0	0	0	0	0	0
		Education	0	0	0	0	0	0	0
		Service Cluster	0	0	0	0	0	0	0
		Visual and Performing Arts Cluster	0	0	0	0	0	0	0
		Trades and Tech Cluster	0	0	0	0	0	0	0
		Sciences Cluster	0	0	0	0	0	0	0
		Law Cluster	0	0	0	0	0	0	0
		Engineering/Architecture Cluster	0	0	0	0	0	0	0
		Health Cluster	0	0	0	0	0	0	0
		Nursing	0	0	0	0	0	0	0
		Other - CIP code unknown or not included in model	0	0	0	0	0	0	0
		Subtotal	0	0	0	0	0	0	0
	Institution Total		643,379	653,558	215,091	16,739	541,151	113,548	2,183,465

Council on Postsecondary Education
Sample Funding Model for the Research University Sector
Distribution of Course Completion Component
Average Weighted Student Credit Hours Earned (Fiscal Years 2013, 2014, and 2015)

Draft - For Discussion Purposes Only

Attachment 4
July 7, 2016

Research Sector Universities			Lower Division	Upper Division	Master's	Other Graduate	Doctor's Research	Doctor's Professional	Total
University of Louisville	Resident SCH Earned	Liberal Arts, Math, Social Sciences, Languages, Other Cluster	145,453	143,424	13,820	25,658	93	6,755	335,203
		Basic Skills Cluster	98	308	8	4,030	0	0	4,444
		Business Cluster	15,110	48,170	48,497	2,071	111	3,478	117,438
		Education	8,138	28,846	40,304	16,445	6	10,059	103,799
		Service Cluster	13,885	29,946	4,946	4,520	6	739	54,041
		Visual and Performing Arts Cluster	22,428	16,940	5,057	14,856	0	422	59,702
		Trades and Tech Cluster	0	0	0	0	0	0	0
		Sciences Cluster	80,189	30,518	5,859	15,674	12,551	7,644	152,434
		Law Cluster	924	1,115	85	127	65,818	21	68,089
		Engineering/Architecture Cluster	32,228	44,991	36,934	21,293	75	1,182	136,704
		Health Cluster	1,435	7,045	21,048	2,096	171,231	4,943	207,799
		Nursing	490	42,630	13,860	991	0	333	58,305
		Other - CIP code unknown or not included in model	4,601	8,514	1,672	1,029	2,837	495	19,149
		Subtotal	324,978	402,446	192,091	108,790	252,729	36,071	1,317,106
	Nonresident SCH Earned	Liberal Arts, Math, Social Sciences, Languages, Other Cluster	11,361	8,422	2,305	676	25	4,645	27,434
		Basic Skills Cluster	8	29	8	1,474	0	23	1,543
		Business Cluster	1,242	4,352	8,957	89	10	1,291	15,941
		Education	314	1,056	4,821	529	0	3,497	10,216
		Service Cluster	1,619	4,220	2,168	2,302	0	342	10,651
		Visual and Performing Arts Cluster	1,871	1,006	4,179	348	0	135	7,538
		Trades and Tech Cluster	0	0	0	0	0	0	0
		Sciences Cluster	5,950	1,237	1,529	524	2,222	7,000	18,463
		Law Cluster	28	29	4	234	10,855	0	11,151
		Engineering/Architecture Cluster	1,550	1,856	7,138	957	49	2,571	14,121
		Health Cluster	89	419	8,005	187	74,183	3,707	86,589
		Nursing	27	1,412	136	35	0	247	1,859
		Other - CIP code unknown or not included in model	266	492	558	166	2,083	169	3,732
		Subtotal	24,326	24,529	39,809	7,521	89,426	23,627	209,239
	Reciprocity SCH Earned	Liberal Arts, Math, Social Sciences, Languages, Other Cluster	9,956	7,820	1,602	1,009	0	349	20,737
		Basic Skills Cluster	9	18	0	295	0	0	322
		Business Cluster	1,014	2,810	3,532	30	0	474	7,860
		Education	438	1,615	1,868	931	0	753	5,606
		Service Cluster	870	2,062	329	291	0	0	3,552
		Visual and Performing Arts Cluster	2,167	1,361	333	1,019	0	17	4,897
		Trades and Tech Cluster	0	0	0	0	0	0	0
		Sciences Cluster	5,501	2,274	656	1,260	0	908	10,598
		Law Cluster	54	34	6	0	0	0	95
		Engineering/Architecture Cluster	2,928	3,852	2,285	1,365	0	43	10,473
		Health Cluster	118	1,528	1,336	95	0	265	3,342
		Nursing	27	3,113	2,623	118	0	226	6,109
		Other - CIP code unknown or not included in model	250	409	78	41	0	0	778
		Subtotal	23,332	26,898	14,649	6,454	0	3,035	74,368
	Institution Total		372,635	453,873	246,550	122,765	342,155	62,734	1,600,712

Council on Postsecondary Education
Sample Funding Model for the Research University Sector
Distribution of Course Completion Component
Average Weighted Student Credit Hours Earned (Fiscal Years 2013, 2014, and 2015)

Attachment 4
July 7, 2016

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Research Sector Universities	Lower Division	Upper Division	Master's	Other Graduate	Doctor's Research	Doctor's Professional	Total
Sector Total	1,016,013	1,107,431	461,641	139,504	883,306	176,282	3,784,177

Note: Pursuant to KRS 164.2951, there are discussions underway among CPE staff about the possibility of excluding from the model any credit hours earned by each individual student that exceed 128 hours at the four-year institutions and 64 credit hours at KCTCS institutions (KRS references 120/60, respectively). The Council is also utilizing a Complete College America study, *Program Requirements for Associate's and Bachelor's Degree: A National Study* , that urges policy-makers to move academic program credit hours into national "norms" for each academic discipline. For the purposes of Kentucky's funding model, discussions are centering around use of the 128 and 64 credit hour thresholds.

Model Outputs

Campus	Credit Hours	Share	Distribution
UK	2,183,465	57.7%	$36,873,000
UofL	1,600,712	42.3%	27,031,900
Total	3,784,177	100.0%	$63,904,900

Course Completion Component: 63,904,900

Council on Postsecondary Education

Attachment 5

Weighted Average Instruction Costs per Credit Hour

April 15, 2015

By Course Level and Discipline (Average of FL, IL, & OH Cost Studies)

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Student Credit Hour Cost by Discipline and Level

	Course Level					
Discipline	Lower Division	Upper Division	Master's	Other Graduate	Doctoral I	Doctoral II
Liberal Arts, Math, Social Sciences, Languages, Other	$221.00	$305.00	$674.00	$674.00	$785.00	$895.00
Basic Skills	$206.00	$251.00	$451.00	$451.00	$653.00	$856.00
Business	$206.00	$297.00	$553.00	$553.00	$1,117.00	$1,682.00
Education	$242.00	$303.00	$478.00	$478.00	$676.00	$874.00
Service	$218.00	$251.00	$451.00	$451.00	$653.00	$856.00
Visual and Performing Arts	$281.00	$462.00	$925.00	$925.00	$927.00	$930.00
Trades and Technologies	$298.00	$406.00	$607.00	$607.00	$746.00	$885.00
Sciences	$244.00	$383.00	$968.00	$968.00	$977.00	$986.00
Law	$314.00	$257.00	$685.00	$685.00	$920.00	$1,155.00
Engineering/Architecture	$324.00	$520.00	$900.00	$900.00	$921.00	$943.00
Health	$296.00	$362.00	$851.00	$851.00	$960.00	$1,070.00
Nursing	$296.00	$362.00	$851.00	$851.00	$960.00	$1,070.00
Other	$206.00	$251.00	$451.00	$451.00	$653.00	$856.00

Credit Hour Cost Indexed to Lowest Credit Hour Cost

	Course Level					
Discipline	Lower Division	Upper Division	Master's	Other Graduate	Doctoral I	Doctoral II
Liberal Arts, Math, Social Sciences, Languages, Other	1.07	1.48	3.27	3.27	3.81	4.34
Basic Skills	1.00	1.22	2.19	2.19	3.17	4.16
Business	1.00	1.44	2.68	2.68	5.42	8.17
Education	1.17	1.47	2.32	2.32	3.28	4.24
Service	1.06	1.22	2.19	2.19	3.17	4.16
Visual and Performing Arts	1.36	2.24	4.49	4.49	4.50	4.51
Trades and Technologies	1.45	1.97	2.95	2.95	3.62	4.30
Sciences	1.18	1.86	4.70	4.70	4.74	4.79
Law	1.52	1.25	3.33	3.33	4.47	5.61
Engineering/Architecture	1.57	2.52	4.37	4.37	4.47	4.58
Health	1.44	1.76	4.13	4.13	4.66	5.19
Nursing	1.44	1.76	4.13	4.13	4.66	5.19
Other	1.00	1.22	2.19	2.19	3.17	4.16

Note: Doctoral I is the arithmetic mean of Master's and Doctoral II

-- Cost figures developed by CPE staff shown in green highlight.

Source: SHEEO Four-State Cost Study.

Council on Postsecondary Education
Sample Funding Model for Kentucky's Research University Sector
Distribution of Progression and Degree Completion Component

Attachment 6
July 7, 2016

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	Bachelor's Degrees				Weighting 1.0	Progression				Weighting 1.0
Campus	Bachelor's Degree Volume	Bachelor's Degrees per 100 FTE Students	Weights	Weighted Bachelor's Degree Volume	Percent of Total	Progression Volume	Progression Rate	Weights	Weighted Progression Volume	Percent of Total
University of Kentucky	4,083	18.54	0.94	3,830	56.3%	8,705	52.2%	1.07	9,331	69.2%
University of Louisville	2,795	20.99	1.06	2,968	43.7%	4,470	45.2%	0.93	4,149	30.8%
	6,878	19.76	2.00	6,798	100.0%	13,175	48.7%	2.00	13,480	100.0%
Allocation Percentages					12.5%					12.5%
Allocation Dollars					1,997,025					1,997,025
Campus					Metric Allocation					Metric Allocation
University of Kentucky					1,125,126					1,382,362
University of Louisville					871,899					614,663
					1,997,025					1,997,025

Council on Postseco
Sample Funding Mo
Distribution of Progr

Attachment 6
July 7, 2016

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					Weighting					Weighting
	Retention				1.0	URM Retention				0.5
Campus	Retention Volume	Retention Rate	Weights	Weighted Retention Volume	Percent of Total	URM Retention Volume	URM Retention Rate	Weights	Weighted URM Retention Volume	Percent of Total
University of Kentucky	3,944	82.4%	1.02	4,020	65.2%	624	76.7%	0.99	616	60.6%
University of Louisville	2,190	79.3%	0.98	2,148	34.8%	396	78.7%	1.01	401	39.4%
	6,134	80.9%	2.00	6,168	100.0%	1,020	77.7%	2.00	1,017	100.0%
Allocation Percentages					12.5%					6.3%
Allocation Dollars					1,997,025					998,513
Campus					Metric Allocation					Metric Allocation
University of Kentucky					1,301,563					604,802
University of Louisville					695,462					393,711
					1,997,025					998,513

Council on Postseco
Sample Funding Mo
Distribution of Progr

Attachment 6
July 7, 2016

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	Low Income Retention				Weighting 0.5	Graduation				Weighting 1.0
Campus	Low Income Retention Volume	Low Income Retention Rate	Weights	Weighted Low Income Retention Volume	Percent of Total	6-Year Grad Volume	6-Year Grad Rate	Weights	Weighted 6-Year Grad Volume	Percent of Total
University of Kentucky	921	75.4%	1.01	930	59.8%	2,404	60.6%	1.06	2,559	67.2%
University of Louisville	630	73.9%	0.99	624	40.2%	1,334	53.3%	0.94	1,248	32.8%
	1,551	74.7%	2.00	1,554	100.0%	3,738	57.0%	2.00	3,807	100.0%
Allocation Percentages					6.3%					12.5%
Allocation Dollars					998,513					1,997,025
Campus					Metric Allocation					Metric Allocation
University of Kentucky					597,566					1,342,366
University of Louisville					400,947					654,659
					998,513					1,997,025

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Sample Funding Mo
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Attachment 6
July 7, 2016

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	URM Graduation				Weighting 0.5	Low Income Graduation				Weighting 0.5
Campus	URM 6-Year Grad Volume	URM 6-Year Grad Rate	Weights	Weighted URM 6-Year Grad Volume	Percent of Total	Low Income 6-Year Grad Volume	Low Income 6-Year Grad Rate	Weights	Weighted Low Income 6-Year Grad Volume	Percent of Total
University of Kentucky	175	43.6%	0.98	171	50.9%	359	47.6%	1.03	370	60.8%
University of Louisville	161	45.8%	1.02	165	49.1%	247	44.7%	0.97	239	39.2%
	336	44.7%	2.00	336	100.0%	606	46.1%	2.00	609	100.0%
Allocation Percentages					6.3%					6.3%
Allocation Dollars					998,513					998,513
Campus					Metric Allocation					Metric Allocation
University of Kentucky					508,172					606,650
University of Louisville					490,341					391,863
					998,513					998,513

Council on Postseco
Sample Funding Mo
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Attachment 6
July 7, 2016

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					Weighting						Weighting
	STEM+H				1.0	Educational Opportunity					1.0
Campus	STEM+H Degree Volume	STEM+H Degrees per 100 FTE Students	Weights	Weighted STEM=H Degree Volume	Percent of Total	Educational Opportunity Volume	Educational Opportunity Rate	Weights	Weighted Educational Opportunity Volume	Percent of Total
University of Kentucky	1,340	32.8%	1.08	1,447	66.8%	1,135	25.7%	0.90	1,022	52.5%
University of Louisville	782	28.0%	0.92	720	33.2%	840	31.3%	1.10	924	47.5%
	2,122	30.4%	2.00	2,167	100.0%	1,975	28.5%	2.00	1,946	100.0%
Allocation Percentages					12.5%					12.5%
Allocation Dollars					1,997,025					1,997,025
Campus					Metric Allocation					Metric Allocation
University of Kentucky					1,333,500					1,048,797
University of Louisville					663,525					948,228
					1,997,025					1,997,025

Council on Postseco
Sample Funding Mo
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Attachment 6
July 7, 2016

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8.0 Aggregate Weighting

Campus	Stop Loss Percentage
University of Kentucky	1.0%
University of Louisville	

Model Inputs

	Formula Pool Totals	Contribution Pool Amount
Allocation Percentages	100.0%	5.0%
Allocation Dollars	15,976,202	15,976,200

Stop Loss Calculations

Campus	Stop Loss Dollar Limits	Post Stop Loss (–) Allocations	Pre Stop Loss (+) Allocations	Percent of Total	Post Stop Loss (+) Allocations
University of Kentucky	(1,867,100)	-	515,604	100.00%	515,602
University of Louisville	(1,328,200)	(515,602)	-	0.00%	-
		(515,602)	515,604	100.00%	515,602

Outcomes Model Calculations

Campus	Contributed Amounts	Formula Amounts	Dollar Difference	Contributed Share	Formula Share	% Point Difference	2017-18 Adj Net General Fund	$ Difference/ Net GF Base
University of Kentucky	9,335,300	9,850,904	515,604	58.4%	61.7%	3.2%	186,705,800	0.3%
University of Louisville	6,640,900	6,125,298	(515,602)	41.6%	38.3%	-3.2%	132,818,400	-0.4%
	15,976,200	15,976,202	2	100.0%	100.0%	0.0%	319,524,200	0.0%