

Tuition, Fees, And Other Costs At Kentucky Public Universities

Draft
November 8, 2018

Program Review and Investigations Committee

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Abstract

The Kentucky Council on Postsecondary Education (CPE) is authorized by statute to set tuition and mandatory fees at Kentucky's eight public universities. For the 9-year period after CPE implemented a tuition ceiling policy, the average annual tuition increase was 4.6 percent, less than half the average in the period preceding the policy change. Students must differentiate between a university's total cost of attendance, which does not take financial assistance into account, and its net price, which does. In academic year 2015, the total cost of attendance for an in-state student living on a Kentucky campus ranged from less than \$19,000 to more than \$25,000, depending on the university. Net prices ranged from more than \$8,000 to more than \$16,000. Since 2007, net price, adjusted for inflation, increased by at least 17 percent at five universities but decreased at three universities. The average net price for Kentucky universities in 2015 was lower than the average of universities in four of seven surrounding states and in 9 of 15 other Southern states. Net price as a percentage of Kentucky median household income ranged from 18 percent to more than 35 percent in 2015, with the percentage increasing at seven of eight universities since 2007. Approximately 93 percent of students at all Kentucky universities received some type of financial aid in academic year 2015, including 68 percent receiving state grant aid. The average institutional grant and loan were each more than \$6,500. Average state grant aid was less than \$2,300. Kentucky's university graduates had a median debt of nearly \$24,000 in FY 2015; the average student's 3-year default rate was 11 percent.

Legislative Research Commission

Frankfort, Kentucky
lrc.ky.gov

Paid for with state funds.

Acknowledgments

The authors of this report thank the staff of the Kentucky Council on Postsecondary Education, especially Senior Fellow and Legislative Liaison Ron Carson; Vice President of Finance and Administration William Payne; Senior Associate for Finance and Administration Shaun McKiernan; Vice President of Policy, Planning, and External Relations Lee Nimocks; Associate Vice President of Data, Research, and Analysis David Mahan; and General Counsel and Associate Vice President Travis Powell.

Budget officials Ryan Green at Eastern Kentucky University, Douglas Allen at Kentucky Community and Technical Colleges, Ray Griffith at Kentucky State University, Teresa Lindgren at Morehead State University, Jackie Dudley at Murray State University, Angela Schaffer at Northern Kentucky University, Angie Martin and Shan Hong Wang at the University of Kentucky, Rick Graycarek at the University of Louisville, and Stacy Garrett at Western Kentucky University provided insight into university financials.

The Integrated Postsecondary Education Data System help desk staff answered our data questions.

Contents

Summary	ix
Chapter 1: Introduction	1
Major Conclusions	2
Organization Of This Report	4
Chapter 2: Kentucky Council On Postsecondary Education	5
Chapter 3: Costs Of Attending Public Universities	13
Tuition And Fees	13
Books And Supplies	17
Living Costs	19
Total Cost Of Attendance	22
Enrollment	26
Chapter 4: Net Price	31
Economic Research	31
Average Net Price Of In-State Students	33
Average Net Price Of In-State Students And Income	38
State General Fund Appropriations And Tuition And Fee Revenue	40
University Revenue And Expenses	47
Chapter 5: Financing Postsecondary Education	51
Student Financial Aid	51
Federal	51
Kentucky Programs	52
Applying For Aid	53
National Trends In Financial Aid	54
Financial Aid In Kentucky	55
State And Institutional Grant Aid	60
Student Loans	69
Chapter 6: Student Loan Debt And Default	73
Student Loans	73
Student Loan Debt	74
Student Loan Debt In Kentucky	75
Student Loan Default Rates	81
Student Loan Repayment Rates	85
Appendix: Data And Research Methods	91
Endnotes	

Tables

2.1	Maximum Base Rate Percentage Increase Ceilings, Academic Years 2008 To 2017.....	9
3.1	Annual In-State Tuition And Fees, Academic Years 2000 To 2015	14
3.2	Annual Out-Of-State Tuition And Fees, Academic Years 2000 To 2015	16
3.3	Average Annual Cost Of Living On-Campus, Academic Years 2000 To 2015.....	20
3.4	Annual Total Cost Of Attendance For In-State, On-Campus Students, Academic Years 2000 To 2015.....	23
3.5	Annual Total Cost Of Attendance For Out-Of-State, On-Campus Students, Academic Years 2000 To 2015.....	25
3.6	In-State Enrollment Of First-Time, Full-Time Students, Academic Years 2000 To 2015	27
3.7	Out-Of-State Enrollment Of First-Time, Full-Time Students, Academic Years 2000 To 2015.....	28
3.8	Percentage Of First-Time, Full-Time Students Paying In-State Tuition, Academic Years 2000-2015	29
3.9	Percentage Change In First-Time, Full-Time Enrollment, Academic Years 2000 To 2015.....	30
4.1	Kentucky Annual Median Earnings By Educational Attainment, Age 25 Years And Older, 2006 To 2016.....	32
4.2	Average Net Price For In-State Students At Kentucky Universities As A Percentage Of Kentucky Median Household Income, 2007 To 2015	38
4.3	Average Net Price Of In-State Students Attending A Public University As A Percentage Of US Median Household Income For Kentucky And Surrounding States, 2007 To 2015.....	39
4.4	Total Expenses As A Percentage Of Total Public Funds Revenue By Expense Category, FY 2006 To FY 2015	48
5.1	Student Financial Aid Programs In Kentucky, 2016	53
5.2	Types Of Financial Aid Awards Offered By Kentucky Public Four-Year Universities, Academic Years 2016 To 2017.....	54
5.3	Average Percentage Of Students Receiving State Grant Aid At Universities In Kentucky And Surrounding States, Academic Years 2000 To 2015	63
5.4	Average Amount Of State Aid Grant Awarded To Students At Universities In Kentucky And Surrounding States, Academic Years 2000 To 2015	64
5.5	Average Percentage Of Students Receiving Institutional Grant Aid At Universities In Kentucky And Surrounding States, Academic Years 2000 To 2015.....	65
5.6	Average Institutional Grant Aid Awarded To Students At Universities In Kentucky And Surrounding States, Academic Years 2000 And 2015.....	65
5.7	Percentage Of Students Receiving State Grant Aid At Universities In Kentucky, Academic Years 2000 And 2015	66
5.8	Average Amount Of State Grant Money Awarded To Students At Universities In Kentucky, Academic Years 2000 And 2015.....	67
5.9	Percentage Of Students Receiving Institutional Grant Aid At Universities In Kentucky, Academic Years 2000 And 2015	68
5.10	Average Amount Of Institutional Grant Aid Awarded To Students At Universities In Kentucky, Academic Years 2000 And 2015.....	69
6.1	Student Loan Programs.....	74

6.2	Average Median Debt Of Students From Universities In Kentucky And Surrounding States, FY 2000 And FY 2015.....	79
6.3	Median Debt Of Students From Universities In Kentucky, FY 2000 And FY 2015.....	79
6.4	Median Debt Of Graduates From Universities In Kentucky, FY 2001 And FY 2015.....	80
6.5	Two-Year Cohort Default Rate Of Students From Universities In Kentucky, FY 2001 And FY 2013	84
6.6	Three-Year Cohort Default Rate Of Students From Universities In Kentucky, FY 2012 And FY 2015	84
6.7	Average 3-Year Repayment Rate Of Students From Universities In Kentucky And Surrounding States, FY 2010 And FY 2015.....	87

Figures

2.A	Tuition And Mandatory Fee Annual Timeline, September 2016 To June 2017	6
2.B	Annual Percentage Change In Tuition And Fees For Resident Undergraduates, Academic Years 2003 To 2018.....	8
3.A	Average Annual In-State Tuition And Fees For Public Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015	15
3.B	Average Out-Of-State Tuition And Fees For Public Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015	17
3.C	Average Annual Cost Of Books And Supplies For Public Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015	18
3.D	Average Annual Cost Of Living On Campus At Public Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015	21
3.E	Average Annual Total Cost Of Attendance For In-State, On-Campus Students At Public Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015.....	24
3.F	Average Annual Total Cost Of Attendance For Out-Of-State, On-Campus Students At Public Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015.....	26
4.A	Average Net Price Of In-State Students Attending Kentucky Universities, Academic Years 2007 To 2015.....	34
4.B	Average Net Price Of In-State Students And Average Total Cost Of Attendance For Kentucky Universities, Academic Years 2007 To 2015.....	35
4.C	Average Net Price Of In-State Students Attending Public Universities In Kentucky And Surrounding States, Academic Years 2007 To 2015.....	36
4.D	Average Net Price Of In-State Students Attending Public Universities In Southern States, Academic Year 2015	37
4.E	State General Fund Appropriations For Kentucky Research Universities, FY 2000 To FY 2015.....	41
4.F	State General Fund Appropriations For Regional Comprehensive Universities In Kentucky, FY 2000 To FY 2015	42
4.G	Average State General Fund Appropriations For Public Universities In Kentucky And Surrounding States, FY 2000 To FY 20015.....	43
4.H	Tuition And Fee Revenue For Kentucky Research Universities, FY 2000 To FY 20015.....	44

4.I	Tuition And Fee Revenue For Kentucky Regional Comprehensive Universities, FY 2000 To FY 2015	45
4.J	Percentage Change In In-State Net Price And State General Fund Appropriations For Kentucky Universities, 2007 To 20015	46
5.A	Average Percentage Of Students Receiving Loans And Federal, State, And Institutional Grants At Universities In Kentucky, Academic Years 2000 To 2015	56
5.B	Average Amount Of Loans And Federal, State, And Institutional Grants At Universities In Kentucky, Academic Years 2000 To 2015	57
5.C	Percentage Of Students Receiving Financial Aid By Type At Universities In Kentucky, Academic Year 2015.....	58
5.D	Average Financial Aid Amount Awarded To Students By Type At Universities In Kentucky, Academic Year 2015.....	59
5.E	Average Percentage Of Students Receiving Any Type Of Financial Aid At Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015.....	60
5.F	Average Percentage Of Students Receiving A State Or Institutional Grant At Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015.....	60
5.G	Average Amount Of State And Institutional Grants Awarded To Students At Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015.....	62
5.H	Average Percentage Of Students Receiving A Student Loan At Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015.....	70
5.I	Average Amount Of Student Loans Awarded At Universities In Kentucky, Surrounding States, And Southern States, Academic Years 2000 To 2015	71
6.A	Average Median Debt Of Students From Universities In Kentucky, Surrounding States, And Southern States, FY 2001 To FY 2015	77
6.B	Average Median Debt Of College Graduates From Universities In Kentucky, Surrounding States, And Southern States, FY 2001 To FY 2015	78
6.C	Median Debt Of Students By Family Income Level From Universities In Kentucky, FY 2015.....	81
6.D	Average 2-Year Cohort Default Rates Of Students From Universities In Kentucky, Surrounding States, And Southern States, FY 2001 To FY 2013	82
6.E	Average 3-Year Cohort Default Rates Of Students From Universities In Kentucky, Surrounding States, And Southern States, FY 2012 To FY 2015	83
6.F	Average 3-Year Cohort Repayment Rates Of Students From Universities In Kentucky Surrounding States, And Southern States, FY 2008 To FY 2015	86
6.G	Three-Year Repayment Rate Of Students By Completion Status From Universities In Kentucky, FY 2015	87
6.H	Three-Year Repayment Rate Of Students By Income Level From Universities In Kentucky, FY 2015.....	90

Summary

The Program Review and Investigations Committee directed staff to examine how tuition, costs, and fees have changed over time at the public postsecondary universities in Kentucky. This report explores the Kentucky Council on Postsecondary (CPE) and its role in setting tuition and mandatory fees at universities in Kentucky, university costs and student expenditures that postsecondary students face, the net price or true cost of a postsecondary education, student financial aid and its importance to students and families, and student undergraduate borrowing and its importance as a source of financial aid.

Kentucky Council on Postsecondary Education

The Kentucky Council on Postsecondary Education was created under HB 1 of the 1997 Kentucky General Assembly as an independent statewide agency. The Kentucky Council on Postsecondary Education consists of a sixteen member council that provides direction and oversight to Kentucky's postsecondary institutions. HB 1 outlined statewide strategic goals to be accomplished by 2020. The Council is responsible for determining tuition, approving minimum qualifications for admission to the state postsecondary education system, and crafting university budget recommendations (KRS 164.020).

Kentucky CPE's process for setting tuition and mandatory fees involves both CPE personnel and university officials. Prior to the 2008-2009 academic year, universities were given more discretion over their own proposed tuition rates. This resulted in larger than desired growth in tuition and fees. A new tuition and mandatory fee policy process was initiated that stressed transparency and inclusion of public discourse. This process resulted in lower tuition increases by proposing tuition and fee ceilings for each university. However, declining state appropriations and fiscal budget constraints continue to pressure universities to raise prices.

University Costs and Student Expenditures

The annual Integrated Postsecondary Education Data System (IPEDS) survey collects information on university costs and student expenditures. IPEDS data was used to estimate costs for first-time, full-time degree-seeking undergraduate students from academic year 2000 to academic year 2015. Universities in Kentucky were compared to universities in surrounding states and states in the Southern Regional Education Board (SREB). We refer to SREB states as Southern states in our report.

In-state tuition and fees at universities in Kentucky more than doubled from academic year 2000 to academic year 2015. Kentucky's average in-state tuition and fees exceeded the averages at universities in Southern states but not at universities in surrounding states. Out-of-state tuition and fees at universities in Kentucky increased more than 80 percent from academic year 2000 to academic year 2015. Kentucky's average out-of-state tuition and fees exceeded averages for universities in surrounding and Southern state.

The total cost of attendance is the sum of tuition, fees, books, supplies, room, board, and miscellaneous expenses before subtracting financial assistance. From academic year 2000 to

academic year 2015, the total cost of attendance for an in-state student living on a Kentucky campus increased from 32.8 percent to 88.1 percent. The average total cost for universities in Kentucky was similar to universities in Southern states and lower than universities in surrounding states. From academic year 2000 to academic year 2015, the total cost of attendance for an out-of-state student residing on a Kentucky campus increased from 42.9 percent to 95.1 percent. The average total cost of attendance for universities in Kentucky was comparable to universities in Southern states and lower than universities in surrounding states.

Net Price

There are two different types of prices that students face. One of those is the total cost of attendance, and the other is the net price or “true cost,” which deducts financial aid that students receive from the total cost of attendance. This report examines average net price using data from the federal IPEDS database from academic years 2007 to 2015.

The average net price for Kentucky universities has increased by 14.4 percent between academic years 2007 and 2015. In 2015, the average net price for Kentucky students was \$11,115. Kentucky’s research universities had an average net price of \$13,893, with an average increase of 25.2 percent. Universities in surrounding states experienced an increase in average net price of 11.3 percent and Southern states experienced an increase of 16.2 percent. Net price as a percentage of median household income increased at 7 of 8 public universities from 2007 to 2015, and increased by an average of 3.7 percent.

State appropriations at Kentucky universities have declined by an average of 26.4 percent from FY 2000 to FY 2015. State appropriations for Kentucky’s research universities declined an average of 33 percent from FY 2000 and FY 2015. State appropriations for regional comprehensive universities decreased by an average of 21 percent. As state appropriations have declined, tuition revenues have increased. Tuition and fee revenue at Kentucky universities increased by an average of 99.9 percent from FY 2000 to FY 2015.

Unrestricted original budget data from university budget officials in Kentucky show universities appropriated an average of 36 percent of their total public funds revenue on instruction in FY 2006 and 8.6 percent on student financial aid. By FY 2017, universities appropriated 31.9 percent for instruction, a decrease of 4.1 percentage points, and 12.8 percent for student financial aid, an increase of 4.2 percentage points.

Student Financial Aid

Financial aid to assist students with the costs of postsecondary education is awarded from three main sources: the federal government, state governments, and educational institutions. Grants, scholarships, and loans are the most common types of student financial aid awards. Federal aid included Pell Grant and Supplemental Education Opportunity Grants in addition to other programs for low income students. Student aid includes funding for the KEES Program and the College Access Program. Typically, grants are awarded according to financial need, and scholarships are awarded on merit or ability. Please not that grant aid that comes to the

universities from “unaffiliated foundations” is not reported in IPEDS, so the total aid to students at the institutions that have unaffiliated foundations is not reflected in this report.

More Kentucky students, based on the IPEDS Student Financial Aid survey received state grants compared to other types of financial aid. However, the average amount of state grants was lower than the average amounts awarded from all other types of financial aid. From academic year 2000 to academic year 2015, state awards remained flat while institutional awards increased. In 2015, 68 percent of students received state financial aid and the average amount was \$2,278. Institutional grants were given to 59 percent of students and the average amount was \$6,900.

Compared to students attending universities in surrounding and Southern states, a larger percentage of Kentucky students received state grant aid in all years between 2000 and 2015 and a larger percentage received institutional grants since 2012. Kentucky awarded the largest average amount of institutional grants since academic year 2009 and the lowest average amount of state grants to students in all years.

In 2015, Kentucky awarded a higher percentage of students with state grants than all surrounding states except Tennessee but the average amount was among the lowest. Kentucky ranked in the middle when compared to the percentage of students receiving institutional grants, but the average amount of institutional grants was the highest.

Student Borrowing

The federal government, Kentucky, and private entities offer loan programs to students to assist with the cost of postsecondary education. The federal government offers two loan programs to undergraduate student borrowers, and Kentucky Higher Education Student Loan Corporation offers the only state-based, private loan in Kentucky.

Student loan debt refers to a student’s total accumulated loan balance. Data from the US Department of Education’s National Student Loan Data System and Office of Federal Student Aid were used to examine debt, default, and repayment trends from FY 2001 to FY 2015. Students from Kentucky universities had lower debt than students from universities in surrounding and Southern states in all years, but had similar values when looking at debt for graduates only. In FY 2015, students in Kentucky had lower debt than students in half of surrounding states.

Default rates measure the percentage of students who do not make progress in repaying loans. Kentucky’s default rates were consistently higher than universities in surrounding and Southern states from FY 2008 to FY 2015. Default rates increased from FY 2007 to FY 2013 and then declined from FY 2013 to FY 2015. In FY 2015, students from universities in Kentucky had a default rate of 11 percent, which was higher than default rates in more than half of surrounding states.

Repayment rates measure the percentage of students who are not in default and have reduced their loan balance since entering repayment. The average repayment rate for all universities declined in Kentucky, in surrounding, and Southern states from FY 2008 to FY 2015. In FY

2015, students from universities in Kentucky had a repayment rate of 49 percent, which was lower than repayment rates in more than half of surrounding states.

Chapter 1

Introduction

At its May 2017 meeting, the Program Review and Investigations Committee directed staff to examine tuition, fees, and other costs at Kentucky's eight public universities. Staff reviewed data and identified the trends of tuition, fees, and costs at the universities for academic years (AY) 2000 to 2015.

Staff identified the trends of tuition, fees, and costs at eight Kentucky universities for academic years (AY) 2000 to 2015: two research universities (University of Kentucky, University of Louisville) and six regional comprehensive universities (Eastern Kentucky University, Kentucky State University, Morehead State University, Murray State University, Northern Kentucky University, and Western Kentucky University). Kentucky universities in Kentucky were compared to public universities in the seven states surrounding Kentucky and states in the Southern Regional Education Board.

The eight universities were categorized as either research universities or regional comprehensive universities. The research universities are the University of Kentucky (UK) and the University of Louisville (UofL). The regional comprehensive universities are Eastern Kentucky University (EKU), Kentucky State University (KSU), Morehead State University (MoSU), Murray State University (MuSU), Northern Kentucky University (NKU), and Western Kentucky University (WKU).

Public universities in Kentucky were compared to public universities in the seven states surrounding Kentucky and states in the Southern Regional Education Board (SREB), a 16-state interstate compact for public universities.^a The SREB member states will be referred to as Southern states throughout the report.

The report excluded 8 specialized medical universities and 14 public universities that were missing any data within the time period observed from any of the variables analyzed.

All dollar amounts in this chapter have been adjusted for inflation to 2015 prices. Converted rates were calculated with the non-seasonally adjusted Consumer Price Index for urban consumers.

^a The surrounding states are Illinois, Indiana, Missouri, Ohio, Tennessee, Virginia, and West Virginia. The SREB states are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. Kentucky participates in SREB programs like the Academic Common Market, which allows out-of-state students to pay in-state prices if their home state universities do not offer a program.

This report covers the Council on Postsecondary Education (CPE) and multiple aspects of university costs, including actual costs paid, financial assistance, and debt.

The four main objectives for staff were to analyze

- the Council on Postsecondary Education’s (CPE) tuition and ceiling setting process;
- tuition, fees, and associated costs at Kentucky’s public universities over time;
- the sources of financial aid at Kentucky’s public universities and the universities in comparison states over time; and
- the net price that students pay to attend Kentucky’s public universities.

Published tuition and fees are the most visible cost of universities. Room, board, books, supplies, and other expenses also contribute to a student’s financial burden. Most students receive some type of financial aid that results in a lower price, referred to as net price. However, this price is not known until the student applies to and is accepted by the university.

CPE is responsible for university tuition rates and collects data on university costs as part of a Federal survey.

KRS 164.020 requires the Kentucky Council on Postsecondary Education to determine tuition for the state postsecondary educational system. In practice, CPE sets annual maximum tuition increases for public universities. CPE is aware of other costs of university attendance because it coordinates data collection for multiple federal surveys that require cost areas besides tuition and fees.

The Integrated Postsecondary Education Data System (IPEDS) surveys were the primary sources of information on university charges, costs, and financial aid. For this report, staff used three surveys from IPEDS: Student Financial Data, Institutional Characteristics, and Finance Data. The analyzed data came from the main campuses of predominately bachelor’s degree-granting public universities from 2000 to 2015. Additionally, College Scorecard data from the US Department of Education were used for debt and default rates. College Scorecard data are based on federal loan information from undergraduate public universities.

A complete guide for the methodology used in the report can be found in the appendix.

Major Conclusions

This report has six major conclusions.

This report has six major conclusions.

- Kentucky Revised Statutes (KRS) authorizes CPE to “determine” tuition. CPE reformed its policy for setting tuition and mandatory fees after academic year 2008–2009 to limit

tuition increases by establishing tuition ceilings for the universities. From 2009 to 2017, the average annual increase in resident undergraduate tuition and fees has been 4.6 percent, down from an annual average of 11.8 percent from 2002 to 2008.

- A university's total cost of attendance, which does not include financial aid, is the sum of tuition, fees, books, supplies, room and board, and other living expenses. For an in-state undergraduate living on campus, the total cost of attendance for attending the University of Kentucky or University of Louisville in academic year 2015 was more than \$25,000. The total cost of attendance for Northern Kentucky University was approximately \$21,000; for Kentucky State University it was less than \$19,000. The price for any of the other four public universities was approximately \$20,000. Since 2000, the University of Louisville's total cost of attendance increased the least after adjusting for inflation, 32 percent. Kentucky State's inflation-adjusted price increased the most, 88.1 percent since 2001. The average total cost for Kentucky universities has consistently been less than the average total cost for universities in surrounding states and has been similar to the average total cost for universities in Southern states in recent years.
- Net price is the total cost of attendance minus the average amount of federal, state, local, institutional grant, and scholarship aid. For academic year 2015, net prices were \$12,492 for Eastern, \$8,206 for Kentucky State, \$11,568 for Morehead, \$10,034 for Murray, \$9,173 for Northern, \$16,673 for UK, \$15,981 for Louisville, and \$10,638 for Western. Since 2007, the net price at UK increased more than 20 percent adjusted for inflation. The increase was nearly 30 percent for Louisville. For regional comprehensive universities, net price increased the most at Morehead, more than 40 percent. Net price increased by nearly 20 percent at Eastern and more than 17 percent at Murray. Net price decreased over this period at Kentucky State, Northern, and Western. The average net price for Kentucky universities in Kentucky in 2015 was lower than the average of universities in four of eight surrounding states. The Kentucky price was lower than that in 9 of 15 Southern states.
- In 2015, average net price at UK and Louisville was more than 35 percent of Kentucky median household income. Net price was more than 25 percent of median income at Eastern and

Morehead; more than 20 percent at Murray, Northern, and Western; and 18 percent at Kentucky State. As a share of median income, net price increased at seven of the eight universities since 2007. Percentage point increases ranged from 0.1 (Northern and Western) to 6.8 or more (UK, Louisville, and Morehead. Net price as a share of income decreased by more than 2 percentage points at Kentucky State.

- Approximately 93 percent or more of students at all Kentucky public universities received at least some type of financial aid in academic year 2015. Sixty-eight percent received state grant aid, a small increase since 2000. The percentage of students receiving other types of aid increased significantly over this period. The percentage of students receiving a federal grant increased from 29 to 44, the percentage receiving institutional grant aid increased from 31 to 59, and the percentage awarded a loan increased from 33 to 60. In 2015, the average institutional grant and loan were each more than \$6,500 on average per student. Average state grant aid was less than \$2,300.
- Kentucky's public university graduates have approximately the same student loan debt as graduates from other states; the amount increased by 50 percent from FY 2008 to FY 2015. In FY 2015, Kentucky's graduates had an average median debt of \$23,822. The average student had an 11 percent 3-year cohort default rate, which was higher than the average rate of 9 percent in other states.

Organization Of This Report

Chapter 2 describes the structure of CPE and the process of setting tuition and mandatory fee ceilings for public postsecondary universities in Kentucky. Chapter 3 outlines the costs of attending public universities and compares Kentucky's average costs with public universities in other states. Chapter 4 explores net price, or the true cost, postsecondary students face. Chapter 5 describes financial aid available to students in Kentucky and compares financial aid in Kentucky to other states. Chapter 6 discusses student loan debt, default rates, and repayment rates and how Kentucky compares to other states.

Chapter 2

Kentucky Council On Postsecondary Education

This chapter examines the Kentucky Council on Postsecondary Education and its role in determining the tuition of Kentucky's public postsecondary education universities.

The Kentucky Council On Postsecondary Education (CPE) was created by the 1997 Kentucky General Assembly under HB 1.

The General Assembly created CPE as an independent coordinating body in 1997 via HB 1 to bring about change and improvement in Kentucky's public postsecondary education system, including the newly created Kentucky Community and Technical College System.¹ CPE was to help bridge the economic and regional diversity that contributed to the difficulty of aligning Kentucky's public postsecondary education institutions around statewide goals.

HB 1 outlines the strategic goals that the state wanted to achieve by the year 2020. These goals are to be reviewed every 4 years (KRS 164.003). Goals include developing a network of integrated public universities that are adequately funded, with nationally ranked or recognized research universities, and a system of universities that offer a broad array of diverse educational opportunities by working cooperatively.

CPE has multiple responsibilities to ensure a coordinated and efficient postsecondary system in Kentucky. It has statutory authority under KRS 164.020.

KRS 164.020 establishes the 39 powers and duties of CPE. Among these is determining tuition and approving minimum qualifications for admissions to the state's public universities (KRS 164.020(8)(a)).

CPE consists of a 16 member board (KRS 164.011). The governor appoints 15 members, comprised of: 13 citizen members, 1 faculty member, and 1 student member. The state's commissioner of education serves as a nonvoting member. CPE appoints a president to a term not to exceed 5-years, which is renewable. The president serves as the primary advocate for postsecondary education and as an advisor to the governor and the General Assembly (KRS 164.013(4)(7)).

Figure 1.A outlines a sample timeline for 2016 – 2017 of the annual tuition and mandatory fee policy process used by CPE.

Figure 2.A
Tuition And Mandatory Fee Annual Timeline
September 2016 To June 2017

Appointment of members to the Tuition Development Work Group	Distribution of a draft of the tuition and mandatory fee policy and the preliminary timeline	CPE shares the preliminary draft and begins initial discussions on tuition and fee ceilings	CPE staff present to Council the recommended annual tuition-setting timeline and tuition and mandatory fee policy for review and approval	CPE staff present tuition and fee ceilings.	Final action taken on each university's proposed rates
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September	November	December &	February	April	June
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Source: Lee Nimocks et al. Council On Postsecondary Education. Interview. July 1, 2017.

CPE's tuition-setting process begins in September and concludes with action taken on universities' proposed tuition and mandatory fee rate schedules in June.

The tuition and mandatory fee setting process begins toward the end of September with the appointment of Council members to the Tuition Development Work Group. The group develops the preliminary tuition setting timeline it will follow and a draft of the tuition and mandatory fee policy for the upcoming academic year. The group will distribute both the timeline and policy draft to the remainder of the Council by mid-November, and will continue to edit the draft for the remainder of the month.²

To assist in developing a tuition and mandatory fee ceiling recommendation, CPE staff and university staff collect data from previous academic years pertaining to funding adequacy, affordability, financial aid, tuition and fee revenue projections, and budgeted student financial aid levels. The data collected will be used to craft CPE's recommended tuition ceilings.³

The draft tuition and mandatory fee policy and preliminary timeline are first shared at December's CPE presidents' meeting.^{a 5} Key issues pertaining to the tuition setting process are identified, and there is an initial discussion regarding tuition and fee ceilings. These same issues are discussed again at the next month's CPE presidents' meeting.⁴

CPE staff present the recommended annual Tuition Setting Timeline and Tuition and Mandatory Fee Policy documents for Council action in February.⁵

^a This is primarily a meeting of CPE staff chaired by the CPE president, but university officials may be invited to attend.

During the March CPE presidents' meeting, the Council staff present draft tuition and fee ceilings to campus presidents for review and discussion.⁶ In mid-March, CPE staff meets with Tuition Development Group members to review and discuss draft and tuition fee ceilings. By the end of the month, CPE has finalized the recommended tuition and fee ceilings for each university that require Council action. At the April Council meeting, members take action on staff's tuition and fee ceiling recommendations.

Finally, the universities submit their proposed tuition and mandatory fee rate schedules by the end of May. At June's meeting, the Council takes action on each institution's proposed tuition and mandatory fee rate schedules for the upcoming academic year.⁷

CPE first revised its tuition policy in 2005 to more closely reflect the following policy objectives:

- Access – College should be accessible and affordable for all qualified Kentuckians;
- Adequacy – Tuition policy decisions should provide adequate total public funding levels;
- Aid – Tuition and student aid policies should be coordinated effectively for students with financial need;
- Alignment – General fund appropriations, financial aid, and tuition and fee policies should be aligned.⁸

CPE's current tuition and mandatory fee process was adopted following academic year 2008-09.

CPE's current tuition and mandatory fee setting process began following the 2008-09 academic year. It was designed to determine tuition that was rational, transparent, and fair. Its previous policy involved individual universities proposing their own tuition and fee rate schedules with little debate.⁹ This created uncertainty for prospective students and their families and provided no effective system to control tuition increases.

Three published reports by CPE were consistent with a policy brief from the Auditor of Public Accounts that found that "tuition policy decisions at the state and institutional levels are having a detrimental impact on the achievement of the 2020 postsecondary education goals" outlined in 1997 HB 1.¹⁰ These reports helped create the context to develop a new tuition and mandatory fee policy. The new policy sought to limit the annual growth of tuition increases and recognize the uncertainty of the level of state appropriations for postsecondary education each academic year. Transparency would be increased by involving both the universities and CPE, and by setting tuition through a proposal, hearing, and approval process.¹¹

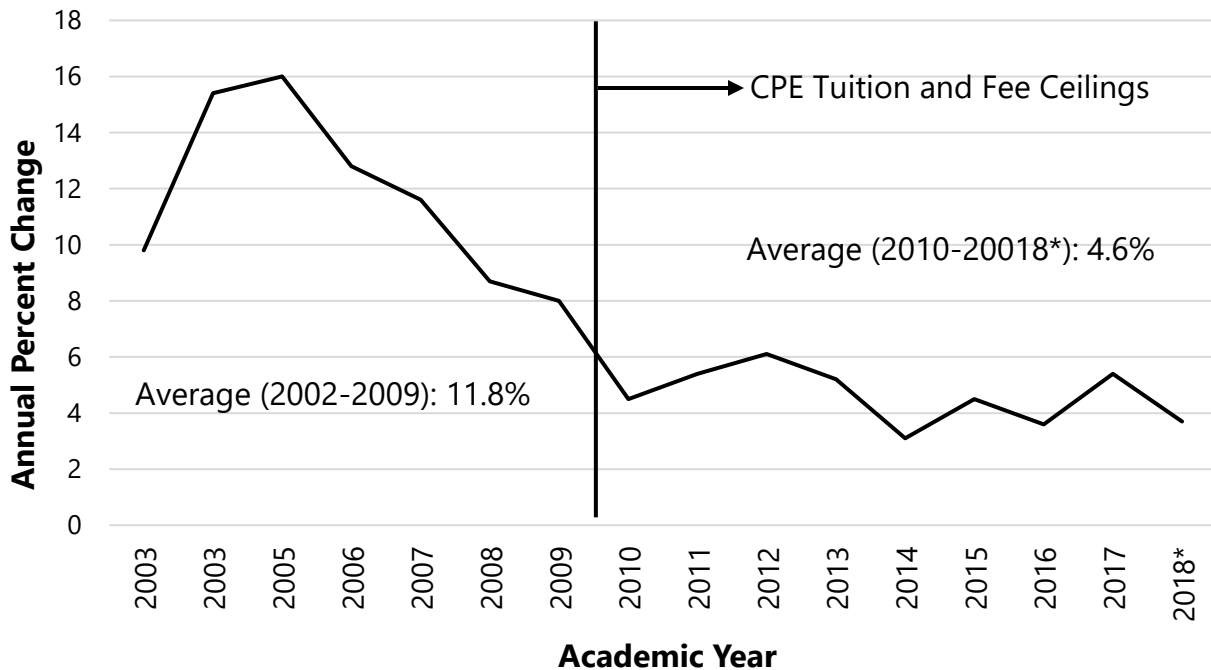
CPE’s tuition and mandatory fee policy sought to limit tuition increases for resident undergraduate students through the adoption of tuition ceilings.

The new policy recommended the use of tuition ceilings proposed by CPE rather than tuition rates requested by individual universities. To bring about increased certainty and facilitate the ability of students and families to plan for college costs, an implicit goal is for increases in resident undergraduate tuition and fee for an upcoming academic year to be set from 3 to 5 percent.¹²

Objectives of the current policy include: advancing the goals of HB 1, adequately funding higher education, prioritizing affordability and access, aligning tuition rates with financial aid, and having tuition reciprocity agreements with public universities in neighboring states.¹³

Figure 1.B shows the system average annual percentage change in resident undergraduate tuition fees for AY 2003 to AY 2018.

Figure 1.B
Annual Percentage Change In Tuition And Fees For Resident Undergraduates
Academic Years 2003 To 2018



Note:* Proposed tuition.
 Source: Council on Postsecondary Education Comprehensive Database.

After the tuition and mandatory fee policy change, the average annual increase in tuition and mandatory fees was 4.6 percent from AY 2009 to AY 2017. Tuition and mandatory fees had increased annually by an average of 11.8 percent from AY 2002 to AY 2008.

Prior to CPE’s adoption of annual tuition and fee ceilings, system average annual percent changes in tuition and mandatory fees averaged 11.8 percent. After the policy change, tuition and mandatory fee increases averaged 4.6 percent per year.^b

Table 2.1 displays CPE’s recommended maximum base rate ceilings by institution for AY 2008 to AY 2018. These percentage increases are used to calculate base rate dollar ceilings.

**Table 2.1
 Maximum Base Rate Percent Increases Ceilings
 Academic Years 2008 To 2017**

	2008	2009	2010	2011	2012	2013	2014	2015*	2016*	2017	2018
UK**	9%	9%	5%	6%	6%	6%	3%	8%	5%	4%	
UofL	12	9	5	6	6	6	3	8	5	0	
EKU***	9.5	7	4	5	5	5	3	8	5.3	5	
KSU***	9.5	7	4	5	5	5	3	8	5.9	5	
MoSU***	9.5	7.4	4	5	5	5	3	8	5.4	5	
MuSU****											
Returning students	9.5	6.1	4	5	5	5	3	8			5
New students	-	-	-	-	-	-	-	-		10.4	5
NKU***	9.5	8.5	4	5	5	5	3	8	4.9	5	
WKU***	7.8	8	4	5	5	5	3	8	4.7	3	

*CPE recommended an approach whereby tuition and mandatory fees were recommended for a 2-year period (academic years 2014-15 and 2015-2016).

**UK offers different tuitions to 1st/2nd and 3rd/4th year students, but the ceilings have been the same for both groups.

***Percentage increases reflect an across-the-board \$432 increase for all comprehensive universities for academic year 2017.

****Beginning in 2016-2017 MuSU began charging different rates for new and returning students.

Source: Kentucky. Council on Postsecondary Education.

In 2014-15, CPE used an approach whereby tuition and fee ceilings were established for a 2-year period instead of annually. Using this approach, resident tuition and fee ceilings were established for academic years 2015 and 2016 so that increases would not exceed 5 percent in any 1 year and would not exceed 8 percent over two years.

The university presidents and chief budget officers advocated for this approach since it facilitates strategic planning and budgeting processes at the institutions and makes college costs more predictable for students and families.¹⁴ CPE went back to setting

^b Proposed 2017 tuition rates are included in the calculation.

annual ceiling for AYs 2016-2017 and 2017-2018, but recently adopted two-year ceilings for AYs 2018-2019 and 2019-2020.

In 2016, comprehensive universities requested a change from the common percentage increase that occurred every year since 2009 for the 2016-2017 tuition and fee setting process. A request to vary the rate increases was made to limit the disparities in published prices among the comprehensive universities. For 2016-2017, the Council approved a ceiling of a common dollar increase of \$432 for each comprehensive university to keep disparities from among the comprehensive universities' published prices from growing.¹⁵

CPE strives to set a tuition ceiling that supports a necessary balance between the ability of students and families to pay for college and resources required for postsecondary institutions to address inflationary cost increases, manage growth in employer paid retirement contributions, and support continuing progress toward the attainment of HB1 Strategic Agenda goals and objectives.¹⁶

¹ N. B. Shulock. "Kentucky's P-16 council. In, States, schools and colleges: Policies to improve student readiness for college and strengthen coordination between schools and colleges." The National Center for Public Policy and Higher Education. P. 84-8. 2009. Web. Sept, 2017.

² Lee Nimocks et al. Council on Postsecondary Education. Interview. July. 1, 2017.

³ Ibid

⁴ Ibid

⁵ Ibid

⁶ Ibid

⁷ Ibid

⁸ Kentucky. Council on Postsecondary Education. Budget and Finance Policy Group Recommendation. 2007 - 2008 Tuition and Mandatory Fees Recommendation. Jan. 29, 2007. Data Request. Aug. 15, 2017.

⁹ Lee Nimocks et al. Council on Postsecondary Education. Interview. July. 1, 2017.

¹⁰ These report were titled: *Double the Numbers, Kentucky's Plan to Increase College Graduates*, *Funding our Future: Kentucky Postsecondary Education 2008-2010 Biennial Budget Request*, and the Council's *2006-2007 Accountability Report*; and Luallen, Crit (2007) Auditor of Public Accounts, Division of Performance Audit, Briefing Report, September 17, 2007, "Recent Kentucky Tuition Increase May Prevent the Achievement of the Commonwealth's 2020 Postsecondary Education Goal." P.1

¹¹ Lee Nimocks et al. Council on Postsecondary Education. Interview. July. 1, 2017.

¹² Ibid

¹³ Kentucky Council on Postsecondary Education. Budget and Finance Policy Group Recommendation. 2008 - 2009 Tuition and Mandatory Fees Recommendation. May 9 2008. Data request. Aug. 15, 2017.

¹⁴ Kentucky Council on Postsecondary Education. Budget and Finance Policy Group Recommendation. Revised. 2014-2015 and 2015-2016 Tuition Ceilings

and Mandatory Fees Recommendation. April 29, 2014. Data Request. Aug. 15, 2017.

¹⁵ Kentucky Council on Postsecondary Education. Budget and Finance Policy Group Recommendation. 2016-2017 Tuition Ceilings and Mandatory Fees Recommendation. April 26 2016. Data Request. Aug. 15, 2017.

¹⁶ Lee Nimocks et al. Council on Postsecondary Education. Interview. July. 1, 2017.

Chapter 3

Costs Of Attending Public Universities

The annual Integrated Postsecondary Education System survey collects information on university costs and student expenditures. It was used to determine the costs of attending Kentucky universities.

The annual Integrated Postsecondary Education Data System survey, conducted by the National Center for Education Statistics, collects information on university costs and student expenditures. Universities must complete the survey if they apply for federal financial assistance programs.¹ Survey sections for institutional characteristics, finances, student financial aid, and net prices were used to estimate the costs of attending universities in Kentucky. Costs were based on the experiences of first-time, full-time, degree-seeking undergraduates. These students had no prior postsecondary experience before registering and enrolled in at least 12 semester credits.²

Tuition And Fees

Tuition charges are the annual rates charged to students who meet the university's in-state or out-of-state residency requirements. They do not reflect any assistance given to students, such as scholarships. Fees are annual fixed-sum charges for items not covered by tuition and are required of most students. For this report, tuition and fees are combined because they are standard costs charged to students based on residency status.

In-state tuition and fees increased more than 100 percent at each Kentucky university from academic year (AY) 2000 to AY 2015.

Table 3.1 provides the annual in-state tuition and fees for eight public universities in Kentucky. In-state tuition and fees more than doubled from AY 2000 to AY 2015. Murray's tuition and fees increased the least, with a 116.3 percent increase. Western's tuition and fees increased the most, 171.9 percent. Tuition and fees were initially similar across the regional universities, but differences among schools increased over time. In AY 2000, the difference between the lowest and highest tuition and fees was \$1,400; by AY 2015, the difference was \$3,300. UK's and Louisville's tuition and fees were similar and higher than any other university. In AY 2000, Northern and Western's rates were similar to rates charged by Eastern, Kentucky State, Morehead, and Murray. Beginning in AY 2011, Northern and Western's rates were higher than those four universities but lower than UK and Louisville.

Table 3.1
Annual In-State Tuition And Fees (In Thousands Of 2015 Dollars)
Academic Years 2000 To 2015

Year	EKU	KSU	MoSU	MuSU	NKU	UK	UofL	WKU
2000	\$3.5	\$3.4	-	\$3.5	\$3.8	\$4.7	\$4.7	\$3.5
2001	4.1	3.3	3.6	3.7	3.9	5.0	5.1	3.8
2002	3.9	4.1	3.9	4.0	4.2	5.2	5.4	4.1
2003	4.1	4.7	4.3	4.4	4.8	5.9	5.7	4.7
2004	4.8	5.0	4.8	5.0	5.5	6.5	6.3	5.8
2005	5.7	5.4	5.2	5.4	6.0	7.1	6.7	6.5
2006	6.6	5.6	5.7	5.9	6.4	7.7	7.4	7.0
2007	7.0	6.1	6.0	6.2	6.8	8.1	7.9	7.3
2008	7.2	6.3	5.9	6.3	7.2	8.5	8.3	7.6
2009	7.5	6.3	6.7	6.6	7.5	9.0	8.8	8.0
2010	7.7	6.0	7.1	6.8	7.7	9.4	9.2	8.2
2011	7.3	6.1	7.3	6.9	8.0	9.6	9.4	8.5
2012	7.6	6.3	7.5	7.1	8.3	10.0	10.0	8.7
2013	7.7	6.4	7.6	7.2	8.5	10.3	10.1	8.9
2014	7.9	7.4	7.9	7.4	8.9	10.6	10.4	9.2
2015	8.2	7.8	8.1	7.6	9.1	10.9	10.7	9.5
% Change, 2000 To 2015	132.9%	130.9%	123.3%*	116.3%	141.1%	130.6%	126.5%	171.9%

Note: Table values are rounded to the nearest \$100, so percentage changes shown do not equal changes for annual values shown.

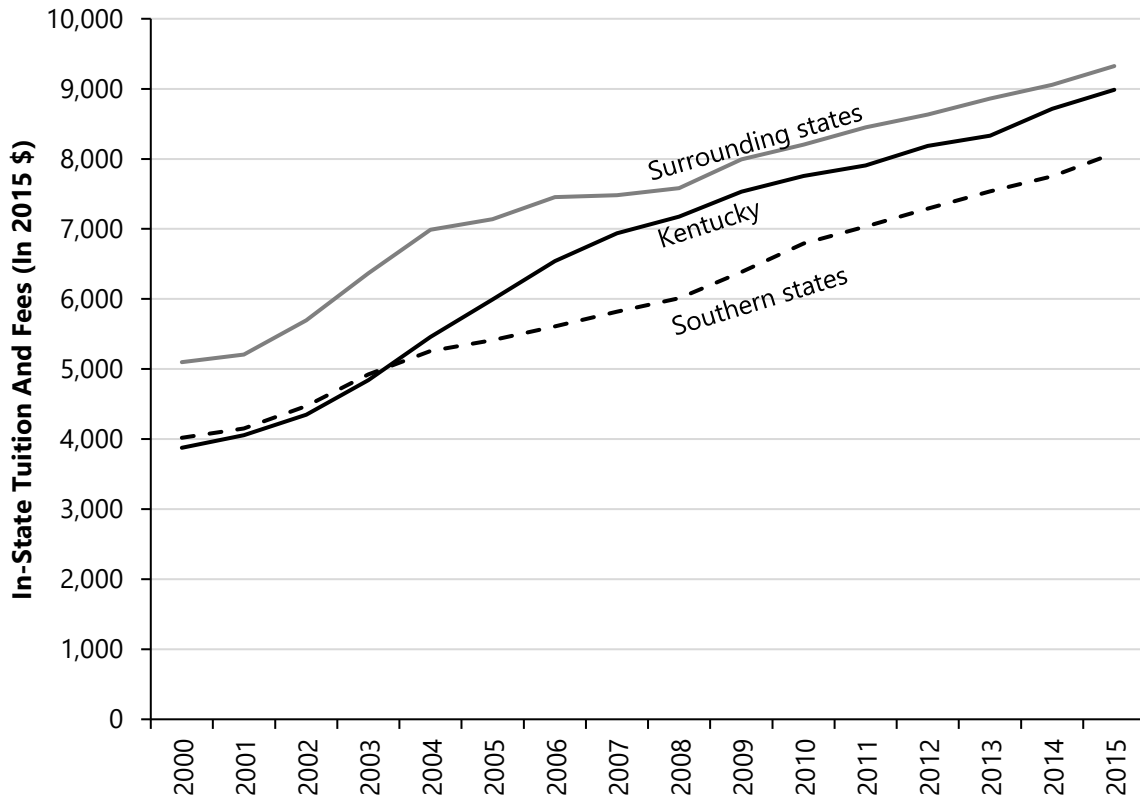
* Percentage change since 2001.

Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Average in-state tuition and fees for Kentucky universities was higher than the average for universities in Southern states but lower than the average for universities in surrounding states.

Figure 3.A compares the average in-state tuition of universities in Kentucky with the average in-state tuition of public universities in surrounding and Southern states. In AY 2000, average Kentucky tuition and fees were similar to those in the Southern group. Kentucky's average increased and has exceeded the Southern states' average since AY 2004. The largest increases occurred in Kentucky from AY 2003 to AY 2006; tuition and fees increased by more than 10 percent each year.

Figure 3.A
Average Annual In-State Tuition And Fees For Public Universities
In Kentucky, Surrounding States, And Southern States (In 2015 Dollars)
Academic Years 2000 To 2015



Note: The averages are for 84 universities in the surrounding states and 193 universities in the Southern states for 2000 to 2014 and 191 universities for 2015.

Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Table 3.2 shows annual tuition and fees for out-of-state students, who are charged higher rates. Universities in Kentucky must set out-of-state prices for revenue to at least equal instructional and service costs.³

Out-of-state tuition increased more than 80 percent at each Kentucky university from AY 2000 to AY 2015.

Out-of-state tuition and fees increased more than 80 percent at every school from AY 2000 to AY 2015. UK's costs increased the least, with an 82.4 percent increase. Western's costs increased the most, with a 156.5 percent increase. In AY 2000, the difference between the lowest and highest prices was \$4,300; in AY 2015, the difference was \$7,400.

Table 3.2
Annual Out-Of-State Tuition And Fees (In Thousands Of 2015 Dollars)
Academic Years 2000 To 2015

Year	EKU	KSU	MoSU	MuSU	NKU	UK	UofL	WKU
2000	\$9.5	\$9.1	-	\$9.5	\$9.6	\$13.3	\$13.4	\$9.4
2001	10.4	8.9	9.6	9.9	9.5	13.8	14.0	9.9
2002	10.6	11.0	10.3	10.7	9.8	13.9	14.7	10.5
2003	11.3	12.0	11.5	12.0	10.3	14.5	15.7	10.9
2004	13.1	12.1	12.8	13.6	11.4	15.0	17.3	14.0
2005	15.9	13.2	13.9	14.6	11.8	15.5	18.3	15.5
2006	17.6	13.3	15.2	15.9	12.0	16.4	19.0	16.9
2007	18.1	14.3	15.2	16.8	12.3	17.0	20.3	17.7
2008	18.8	14.9	15.5	17.2	13.2	17.5	20.2	18.8
2009	19.6	15.5	16.7	17.9	14.1	18.4	21.3	19.6
2010	20.2	13.2	17.6	18.5	15.1	19.2	22.2	20.5
2011	20.1	13.5	18.3	18.9	15.9	19.7	22.8	21.1
2012	17.0	13.8	18.8	19.2	16.5	20.5	23.9	21.7
2013	16.9	15.3	19.1	19.5	16.8	21.6	24.2	22.6
2014	17.5	17.2	19.7	20.1	17.3	22.9	24.3	23.4
2015	17.6	18.1	20.2	20.7	17.9	24.3	25.1	24.1
% Change, 2000 To 2015	86.2%	97.5%	110.0%*	118.1%	85.4%	82.4%	86.7%	156.5%

Note: Table values are rounded to the nearest \$100, so percentage changes shown do not equal changes for annual values shown.

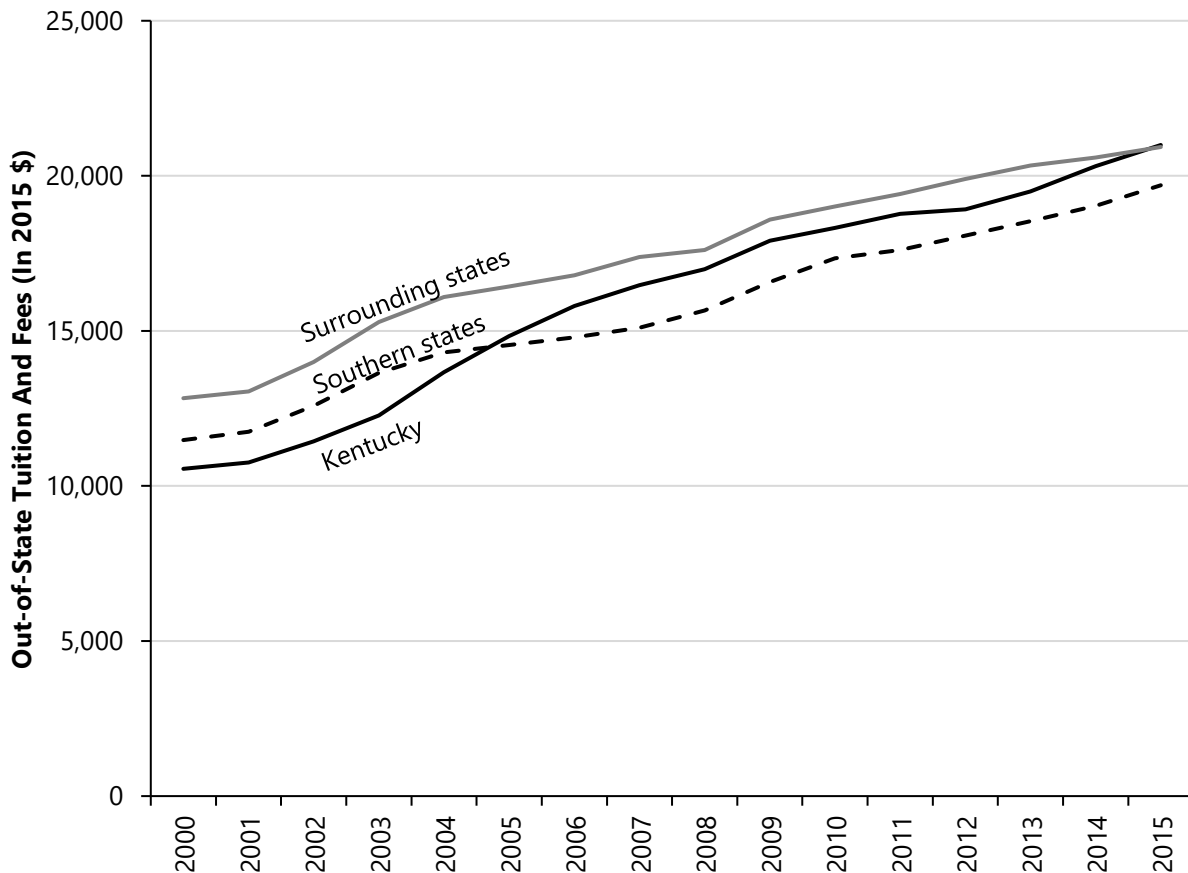
* Percentage change since 2001.

Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Average out-of-state tuition and fees for Kentucky universities exceeded both comparison groups by AY 2015.

Figure 3.B displays the average annual out-of-state tuition and fees for universities in Kentucky, surrounding states, and Southern states. Competitive out-of-state rates are preferred because CPE determined it cannot meet education attainment goals with Kentucky residents alone.⁴ Kentucky's average out-of-state tuition and fees were initially below both comparison groups. Kentucky's tuition and fees have exceeded the Southern states' average since AY 2005 and exceeded the surrounding states' average in AY 2015. Average out-of-state tuition and fees in Kentucky increased by more than 6 percent per year from AY 2001 to AY 2006 in inflation-adjusted dollars.

Figure 3.B
Average Out-Of-State Tuition And Fees For Public Universities In Kentucky,
Surrounding States, And Southern States (In 2015 Dollars)
Academic Years 2000 To 2015



Note: The averages are for 84 universities in the surrounding states, and 193 universities in the Southern states for 2000 to 2014 and 191 universities for 2015.
 Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Books And Supplies

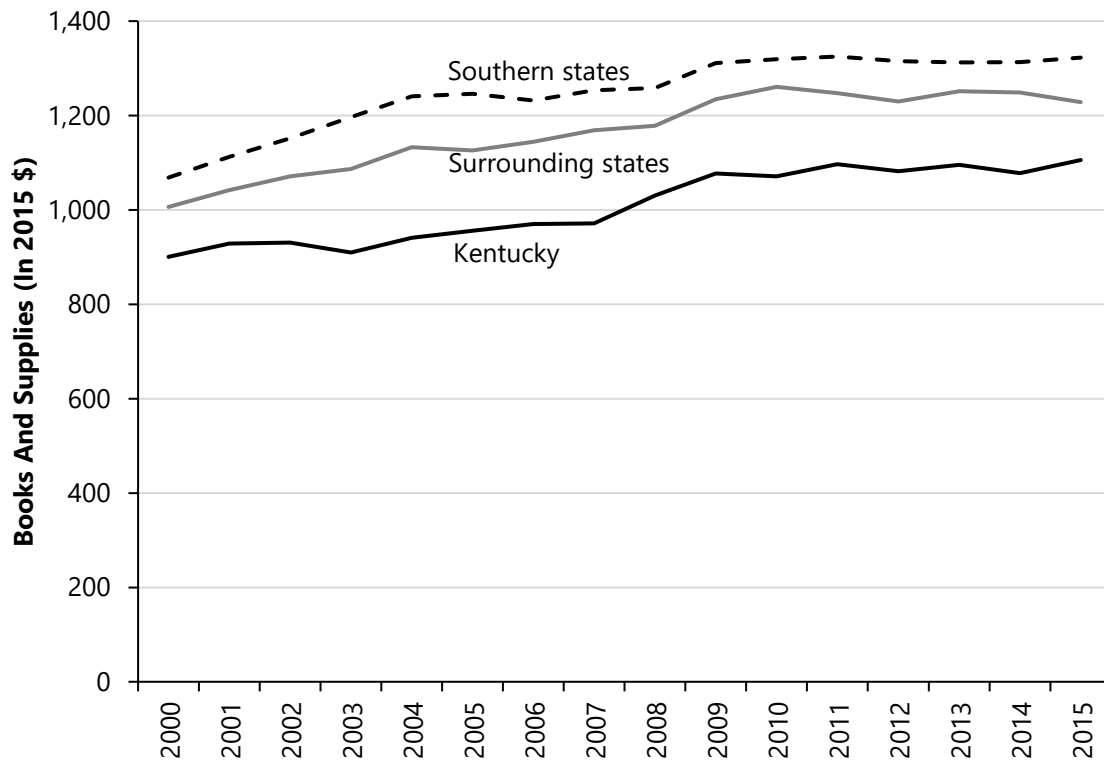
In AY 2015, the reported cost for books and supplies ranged from \$800 (Northern) to \$1,345 (Murray).

The IPEDS-estimated annual cost of books and supplies is for a typical student. Costs for specific groups of students, such as engineering or art students, are not included. Universities reported the same book and supply cost for multiple years. For example, Northern reported \$800 for AY 2004 to AY 2015. For this reason, it would be misleading to show trends in such costs for specific universities over time. In AY 2015, the annual reported cost for books and supplies was \$800 for Northern; \$1,000 for Eastern, UK, and Western; \$1,200 for Morehead and Louisville; \$1,300 for Kentucky State; and \$1,345 for Murray.

Average book and supply costs for Kentucky universities were lower than for the comparison groups for all years.

Figure 3.C compares the average cost of books and supplies at universities in Kentucky with the cost at universities in surrounding and Southern states. Kentucky's book and supply costs have remained consistently below both groups' averages. Kentucky's average supply costs grew at a slower rate than tuition and fees. From AY 2000 to 2015, Kentucky's average books and supplies costs increased by \$205 or 22.8 percent. The surrounding states' average grew by 22.0 percent and the Southern states' average grew by 23.8 percent.

Figure 3.C
Average Annual Cost Of Books And Supplies For Public Universities In Kentucky, Surrounding State, And Southern States (In 2015 Dollars)
Academic Years 2000 To 2015



Note: The averages are for 82 universities in the surrounding states for 2000 to 2001, and 84 universities for 2002 to 2015 and 192 universities in the Southern states for 2000 to 2001, 193 universities for 2002 to 2011, 191 universities for 2012 to 2014, and 190 universities in 2015. Survey results for living costs are updated in future years and this figure uses the most recent data for each year. 2000 to 2005 use costs from surveys two years later, 2006 to 2013 use costs from surveys three years later, and 2014 and 2015 use costs from 2015's survey.

Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Living Costs

The IPEDS survey divides living costs into room and board and all other expenses. Room charges assume a student lives with one other student. Board charges assume a student eats a typical number of meals per week. University staff must estimate costs for students who live off campus. For the other expenses category, financial aid offices estimate the total sum of expenses such as laundry, transportation, entertainment, and furnishings for a typical student.

Changes in the cost of living on campus from AY 2000 to AY 2015 varied between -0.2 percent (Louisville) to 70.4 percent (Kentucky State).

Table 3.3 provides the average annual cost of living on campus. Living at UK or Louisville costs more than living on the other campuses. Since AY 2000, costs increased the most at Kentucky State, with a 70.4 percent increase. Costs at Louisville decreased 0.2 percent, but its costs were significantly higher than other schools in AY 2000. Louisville's costs for AY 2000 to AY 2003 were later revised to lower values but the change does not appear in IPEDS.⁵ Louisville's costs also decreased in AY 2008 after a change in how other living expenses were calculated.⁶ Excluding UK and Louisville, costs were stable or decreased in later academic years.

Table 3.3
Average Annual Cost Of Living On-Campus (In Thousands Of 2015 Dollars)
Academic Years 2000 to 2015

Year	EKU	KSU	MoSU	MuSU	NKU	UK	UofL	WKU
2000	\$7.1	\$5.6	\$6.7	\$7.3	\$8.1	\$9.1	\$13.3	\$7.4
2001	7.1	5.3	6.7	7.3	8.3	9.1	13.2	7.5
2002	7.2	7.4	6.9	7.3	8.7	9.9	16.6	7.2
2003	7.5	7.6	6.8	7.3	8.7	9.9	14.8	8.0
2004	7.7	7.8	7.0	7.3	8.9	10.5	11.7	7.9
2005	8.1	9.4	7.3	7.3	9.4	11.1	11.9	8.1
2006	8.3	10.0	8.2	7.7	9.4	11.7	11.8	8.1
2007	9.5	9.9	8.5	8.0	9.8	11.8	10.4	8.3
2008	9.9	10.1	8.4	9.4	10.3	12.1	10.1	8.1
2009	9.6	11.6	8.8	10.2	9.6	12.4	11.9	8.8
2010	10.2	11.4	9.7	11.4	9.6	12.7	12.0	8.9
2011	10.4	11.6	10.0	11.4	9.9	12.9	12.4	9.4
2012	10.4	11.5	10.1	10.5	10.0	12.9	12.1	9.2
2013	10.6	10.1	10.3	10.7	10.2	12.8	12.1	9.3
2014	10.8	9.5	10.5	10.7	10.9	13.7	12.9	9.0
2015	11.0	9.6	10.9	11.1	11.0	14.8	13.3	9.2
% Change, 2000 To 2015	55.6%	70.4%	61.4%	51.6%	36.3%	63.0%	-0.2%	25.2%

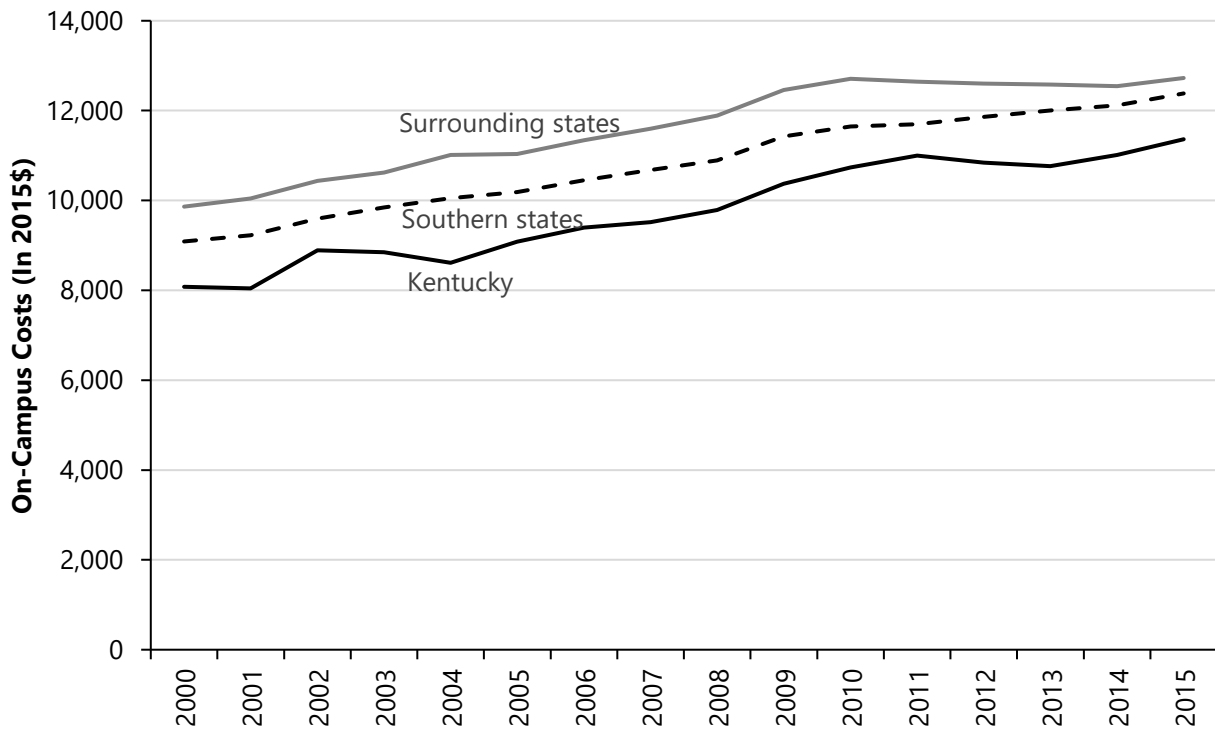
Note: Survey results for living costs are updated in future years and this table uses the most recent data for each year: 2000 to 2005 use costs from surveys 2 years later, 2006 to 2013 use costs from surveys 3 years later, and 2014 and 2015 use costs from 2015's survey. Table values are rounded to the nearest \$100, so percentage changes shown do not equal changes for annual values shown.

Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Kentucky's on-campus costs never exceeded the costs of the two comparison groups.

Figure 3.D shows the average on-campus living cost for universities in Kentucky and the two comparison groups. On-campus living costs were lowest in Kentucky for every year.

Figure 3.D
Average Annual Cost Of Living On Campus At Public Universities In Kentucky,
Surrounding States, And Southern States (In 2015 Dollars)
Academic Years 2000 To 2015



Note: The averages are for 84 universities in the surrounding states' average. 193 universities were included in the Southern states' average for 2000 to 2014; 191 were included in 2015. Survey results for living costs are updated in future years and this figure uses the most recent data for each year. 2000 to 2005 use costs from surveys two years later, 2006 to 2013 use costs from surveys three years later, and 2014 and 2015 use costs from 2015's survey.

Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Off-campus costs were not analyzed because universities may estimate costs with different methods and because entries were missing for multiple Kentucky universities.

IPEDS collects estimates of off-campus living costs from universities. Staff did not analyze the data because off-campus costs may be calculated inconsistently and some data were missing. The National Center for Education Statistics does not provide guidance for calculating off-campus costs. Respondents are told to enter amounts used by their financial aid office to determine student budgets.⁷ Universities may measure off-campus costs differently, making comparisons across universities less accurate. Off-campus costs were missing for multiple years for Eastern, Kentucky State, Morehead, Murray, and Western.

Total Cost Of Attendance

Changes in the total cost of attendance from AY 2000 to AY 2015 for in-state, on-campus students varied from 32.8 percent (Louisville) to 88.1 percent (Kentucky State).

A university's total cost of attendance is the sum of published tuition and fees, books, supplies, room and board, and other living expenses. It does not include financial aid. The total cost varies depending on whether a student pays the in-state or out-of-state tuition rates and whether the student lives on campus or off campus. Table 3.4 displays the annual total cost for in-state students living on campus. The annual cost of attending UK or Louisville in AY 2015 was more than \$25,000. Attending Northern cost approximately \$21,000; attending Kentucky State cost less than \$19,000. Attending any other university in Kentucky cost approximately \$20,000. Louisville's costs grew the least, increasing 32.8 percent from AY 2000. Kentucky State's costs grew the most, increasing 88.1 percent from AY 2001.

Table 3.4
Annual Total Cost Of Attendance For In-State, On-Campus Students
(In Thousands of 2015 Dollars)
Academic Years 2000 To 2015

Year	EKU	KSU	MoSU	MuSU	NKU	UK	UofL	WKU
2000	\$11.4	\$10.4	-	\$11.8	\$12.8	\$14.5	\$19.0	\$11.7
2001	12.1	9.9	11.1	11.9	13.0	14.9	19.2	12.1
2002	12.2	12.8	11.5	12.2	13.7	15.9	22.9	12.1
2003	12.7	13.7	11.9	12.6	14.4	16.5	21.4	13.5
2004	13.5	14.1	12.7	13.2	15.4	17.8	19.0	14.5
2005	14.7	16.1	13.4	13.5	16.4	19.0	19.6	15.5
2006	15.9	16.7	15.0	14.4	16.8	20.3	20.1	16.0
2007	17.4	17.3	15.5	14.9	17.5	20.8	19.3	16.6
2008	18.2	17.7	15.4	16.8	18.4	21.5	19.6	16.6
2009	18.2	19.3	16.5	17.9	18.0	22.3	21.7	17.8
2010	19.0	18.8	17.8	19.3	18.3	22.9	22.2	18.2
2011	18.8	19.1	18.5	19.6	18.8	23.4	22.9	19.0
2012	19.0	19.1	18.9	18.9	19.2	23.7	23.1	19.0
2013	19.3	17.8	19.2	19.2	19.5	24.1	23.2	19.2
2014	19.8	18.2	19.5	19.4	20.6	25.4	24.4	19.2
2015	20.2	18.6	20.2	20.0	20.9	26.7	25.3	19.7
% Change, 2000 To 2015	76.8%	88.1%	81.5%*	68.4%	64.1%	84.3%	32.8%	68.6%

Note: Survey results for living costs are updated in future years and this table uses the most recent data for each year. 2000 to 2005 use costs from surveys two years later, 2006 to 2013 use costs from surveys three years later, and 2014 and 2015 use costs from 2015's survey. Table values are rounded to the nearest \$100, so percentage changes shown do not equal changes for annual values shown.

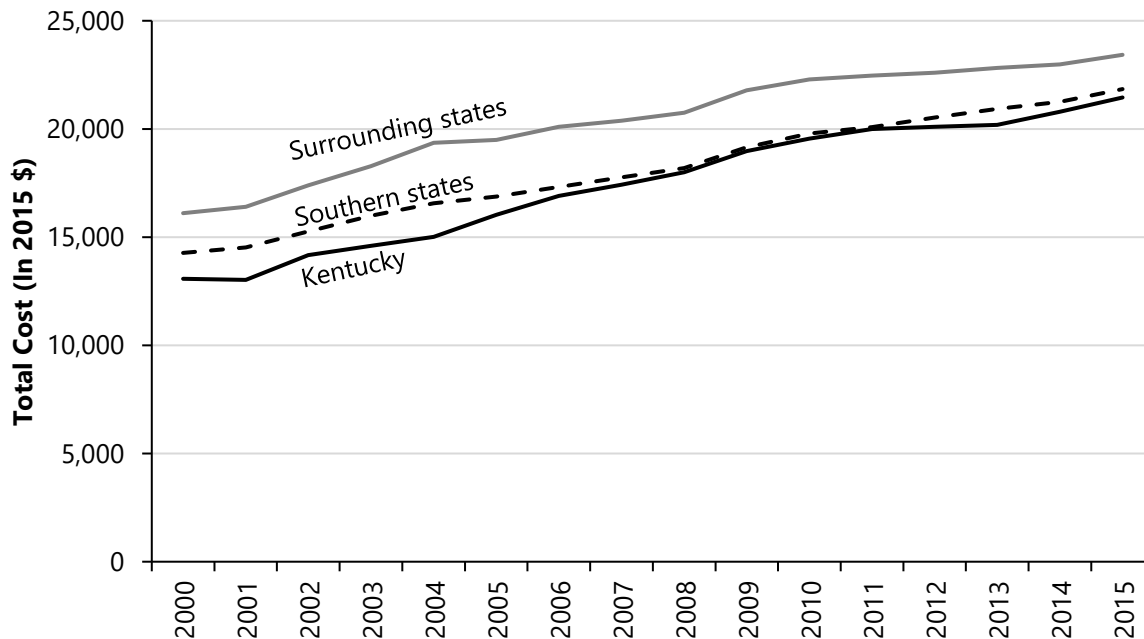
* Percentage change since 2001.

Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Kentucky's average total cost of attendance for in-state students living on campus matched the Southern states' average starting in AY 2007.

Figure 3.E displays the average annual total cost of attendance for an in-state student who lives on campus. Kentucky's average is similar to the Southern states' average beginning in AY 2007, but it is always below the surrounding states' average. Kentucky's average increased by 64.1 percent over the period.

Figure 3.E
Average Annual Total Cost Of Attendance For In-State, On-Campus Students At Public Universities In Kentucky, Surrounding States, And Southern States (In 2015 Dollars) Academic Years 2000 to 2015



Note: The averages are for 84 universities in the surrounding states' average, and 193 universities in the Southern states' average for 2000 to 2014; and 191 universities for 2015. Survey results for living costs are updated in future years and this figure uses the most recent data for each year. 2000 to 2005 use costs from surveys two years later, 2006 to 2013 use costs from surveys three years later, and 2014 and 2015 use costs from 2015's survey.

Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Changes in total costs of attendance from AY 2000 to AY 2015 for out-of-state, on-campus students varied from 42.9 percent (Louisville) to 95.1 percent (Western).

Table 3.5 provides the annual total cost of attendance for out-of-state students who live on campus. Living on campus at UK or Louisville was more expensive than at the other universities, at approximately \$40,000 for AY 2015. Out-of-state charges for Morehead, Murray, and Western cost \$32,000 to \$34,000. Costs at Eastern, Kentucky State, and Northern were less than \$30,000. Costs at Western increased the most, with a 95.1 percent increase since AY 2000. Louisville's costs increased the least, with a 42.9 percent increase.

Table 3.5
Annual Total Cost Of Attendance For Out-Of-State, On-Campus Students
(In Thousands Of 2015 Dollars)
Academic Years 2000 to 2015

Year	EKU	KSU	MoSU	MuSU	NKU	UK	UofL	WKU
2000	\$17.4	\$16.1	-	\$17.8	\$18.6	\$23.0	\$27.7	\$17.6
2001	18.4	15.5	17.1	18.1	18.7	23.6	28.1	18.2
2002	18.9	19.7	17.9	18.9	19.3	24.5	32.2	18.6
2003	19.9	20.9	19.1	20.2	19.9	25.1	31.4	19.7
2004	21.9	21.2	20.7	21.8	21.3	26.3	30.0	22.7
2005	25.0	23.9	22.1	22.8	22.2	27.5	31.2	24.5
2006	26.9	24.4	24.5	24.5	22.4	29.0	31.7	26.0
2007	28.5	25.5	24.8	25.6	23.0	29.7	31.6	26.9
2008	29.8	26.2	24.9	27.6	24.3	30.4	31.4	27.8
2009	30.3	28.5	26.5	29.2	24.6	31.7	34.3	29.5
2010	31.5	26.0	28.4	31.0	25.6	32.8	35.3	30.5
2011	31.5	26.4	29.5	31.5	26.6	33.5	36.3	31.5
2012	28.4	26.7	30.2	31.0	27.3	34.2	37.0	31.9
2013	28.5	26.8	30.6	31.6	27.7	35.4	37.3	32.9
2014	29.3	28.0	31.4	32.2	29.0	37.6	38.3	33.4
2015	29.7	28.9	32.3	33.1	29.7	40.0	39.6	34.4
% Change, 2000 To 2015	70.6%	79.3%	88.7%*	86.5%	59.5%	73.7%	42.9%	95.1%

Note: Survey results for living costs are updated in future years and this table uses the most recent data for each year: 2000 to 2005 use costs from surveys 2 years later, 2006 to 2013 use costs from surveys 3 years later, and 2014 and 2015 use costs from 2015's survey. Table values are rounded to the nearest \$100, so percentage changes shown do not equal changes for annual values shown.

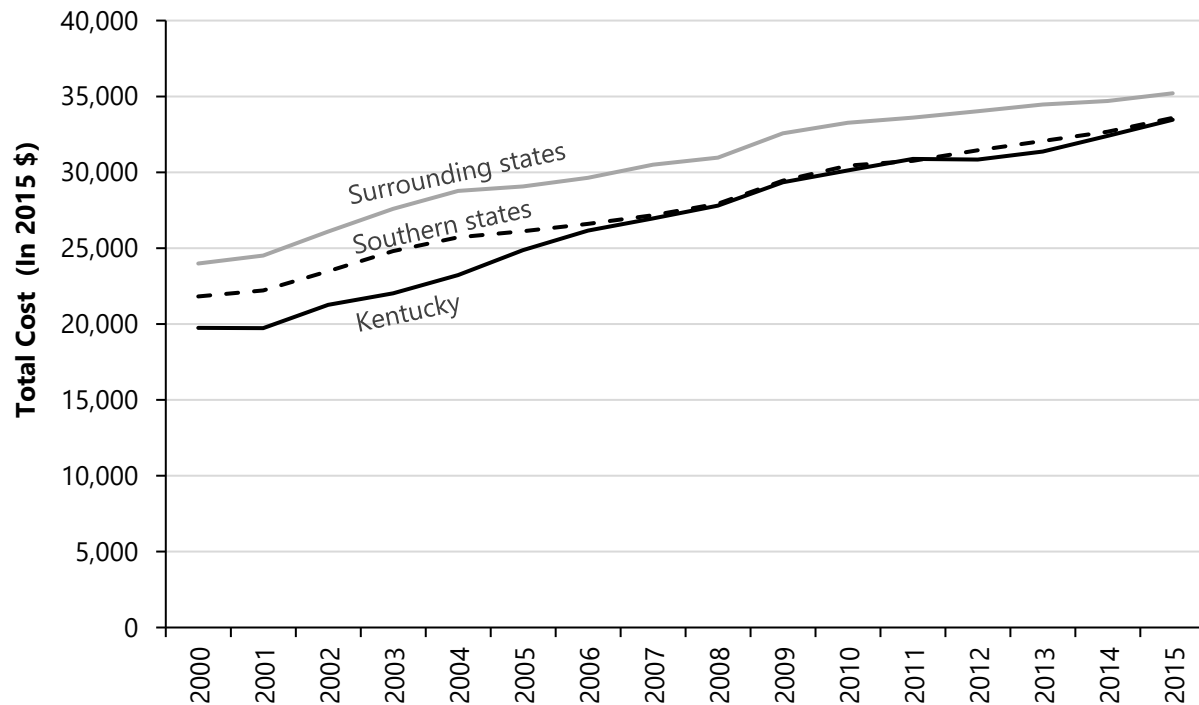
* Percentage change since 2001.

Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Kentucky's average total cost of attendance for out-of-state students living on campus is similar to the Southern state's average beginning in 2007, but is always below the surrounding states' average.

Figure 3.F provides the average total cost of attendance for out-of-state students who live on campus. Similar to in-state students, the Kentucky average is similar to the Southern state average beginning in 2007 but is always below the surrounding states' average. Kentucky's average price increased by 69.4 percent between AY 2000 and AY 2015.

Figure 3.F
Average Annual Total Cost Of Attendance For Out-Of-State, On-Campus Students
At Public Universities In Kentucky, Surrounding States, And Southern States
(In 2015 Dollars)
Academic Years 2000 To 2015



Note: The averages are for 84 universities in the surrounding states, and 193 universities in the Southern states' average for 2000 to 2014; and 191 universities for 2015. Survey results for living costs are updated in future years and this figure uses the most recent data for each year. 2000 to 2005 use costs from surveys two years later, 2006 to 2013 use costs from surveys three years later, and 2014 and 2015 use costs from 2015's survey. Source: Integrated Postsecondary Education Data System, Institutional Characteristics survey, 2000 to 2015, National Center for Education Statistics.

Enrollment

Changes in enrollment for in-state students from AY 2000 to AY 2015 ranged from a 19.4 percent decrease (Kentucky State) to 47.9 percent increase (UK).

The IPEDS survey collects the number of first-time, full-time students enrolled at a university as of October 15 or an alternative fall semester reporting date. Table 3.6 shows the in-state enrollment for universities in Kentucky. Students are considered in-state if they pay the in-state rate. The majority of Kentucky universities had enrollment increases of 20.8 percent to 27.2 percent. Northern's enrollment was relatively stable and increased 8.0 percent. UK's enrollment and enrollment growth was greater than the other universities, with a 47.9 percent increase from AY 2000 to AY 2015. Kentucky State's enrollment decreased 19.4 percent from AY 2000 to AY 2015.

Table 3.6
In-State Enrollment Of First-Time, Full-Time Students
Academic Years 2000 To 2015

Year	EKU	KSU	MoSU	MuSU	NKU	UK	UofL	WKU
2000	1,824	-	1,099	765	1,308	2,214	1,957	1,931
2001	1,502	-	1,074	807	1,265	2,326	1,930	1,931
2002	1,733	175	1,245	911	1,336	2,589	1,943	2,032
2003	1,808	121	1,184	943	1,364	2,995	1,947	2,280
2004	2,044	45	1,238	930	1,431	2,932	2,072	2,226
2005	2,010	129	1,044	967	1,337	3,108	2,167	2,271
2006	2,061	203	1,087	978	1,250	2,913	2,074	2,529
2007	1,997	253	1,098	929	1,319	3,141	2,192	2,580
2008	1,994	276	1,165	971	1,296	2,900	2,272	2,514
2009	2,036	189	1,125	989	1,267	3,152	2,329	2,622
2010	2,156	217	1,056	952	1,531	3,260	2,188	2,705
2011	2,175	218	948	906	1,512	3,327	2,227	2,683
2012	2,049	194	1,141	960	1,480	3,104	2,277	2,615
2013	1,981	128	1,385	988	1,367	3,239	2,376	2,507
2014	2,107	207	1,450	944	1,392	3,300	2,500	2,228
2015	2,281	141	1,375	930	1,412	3,274	2,489	2,332
% Change, 2000 To 2015	25.1%	-19.4%*	25.1%	21.6%	8.0%	47.9%	27.2%	20.8%

* Percent change since 2002.

Source: Integrated Postsecondary Education Data System, Financial Aid survey, 2000 to 2015, National Center for Education Statistics.

Table 3.7 displays out-of-state enrollment at Kentucky's universities. UK's enrollment increased more than any other Kentucky university, with a 260.5 percent increase from AY 2000 to AY 2015. Northern's enrollment increased by 88.4 percent. Eastern's enrollment increased by 48.8 percent. Louisville's enrollment increased by 1.2 percent. Out-of-state enrollment decreased at Kentucky State and Morehead.

Table 3.7
Out-Of-State Enrollment Of First-Time, Full-Time Students
Academic Years 2000 To 2015

Year	EKU	KSU	MoSU	MuSU	NKU	UK	UofL	WKU
2000	172	-	201	401	388	430	339	482
2001	140	-	358	411	366	564	320	485
2002	266	197	353	492	401	527	270	538
2003	372	218	388	517	436	697	93	631
2004	411	54	323	553	538	734	133	739
2005	445	175	271	450	581	824	154	599
2006	439	204	228	468	510	916	185	542
2007	436	314	233	461	591	977	192	548
2008	437	386	283	428	601	937	257	513
2009	419	475	189	469	617	927	220	589
2010	363	309	163	424	658	851	253	590
2011	379	394	197	459	721	954	285	601
2012	318	353	175	549	737	978	237	672
2013	293	262	225	615	688	1,349	271	789
2014	273	312	187	625	826	1,319	307	837
2015	256	143	165	560	731	1,550	343	747
% Change, 2000 To 2015	48.8%	-27.4%*	-17.9%	39.7%	88.4%	260.5%	1.2%	55.0%

* Percent change since 2002.

Source: Integrated Postsecondary Education Data System, Financial Aid survey, 2000 to 2015, National Center for Education Statistics.

Except at Kentucky State, the majority of Kentucky universities' first-time, full-time students are in-state students.

Table 3.8 shows the percentage of first-time, full time students paying in-state tuition. The majority of first-time students at every university, other than Kentucky State, are in-state. The percentage of students paying in-state tuition at UK decreased from 83.7 percent to 63.6 percent from academic years 2000 to 2015. The percentage of students paying in-state rates at Northern decreased from 77.1 percent to 65.9 percent, respectively. Eastern and Morehead's percentages approached 90 percent in later years. Louisville's percentage was near 90 percent in most years.

Table 3.8
Percentage Of First-Time, Full-Time Students Paying In-State Tuition
Academic Years 2000 To 2015

Year	EKU	KSU	MoSU	MuSU	NKU	UK	UofL	WKU
2000	91.4%	-	84.5%	65.6%	77.1%	83.7%	85.2%	80.0%
2001	91.5	-	75.0	66.3	77.6	80.5	85.8	79.9
2002	86.7	46.9	77.9	64.9	76.9	83.1	87.8	79.1
2003	82.9	32.4	75.3	64.6	75.8	81.1	88.0	78.3
2004	83.3	14.7	79.3	62.7	72.7	80.0	94.0	75.1
2005	81.9	37.3	79.4	68.2	69.7	79.0	93.4	79.1
2006	82.4	49.9	82.7	67.6	71.0	76.1	91.8	82.4
2007	82.1	44.6	82.5	66.8	69.1	76.3	91.9	82.5
2008	82.0	41.7	80.5	69.4	68.3	75.6	89.8	83.1
2009	82.9	28.5	85.6	67.8	63.3	77.3	91.4	81.7
2010	83.2	41.3	84.8	69.2	69.9	79.3	89.6	82.1
2011	85.2	35.6	80.6	66.4	67.7	77.7	88.7	81.7
2012	86.6	35.5	83.8	63.6	66.8	76.0	90.6	79.6
2013	87.1	32.8	84.5	61.6	66.5	70.6	89.8	76.1
2014	88.5	39.9	85.7	60.2	62.8	71.4	89.1	72.7
2015	89.9	49.6	89.2	62.4	65.9	63.6	87.9	75.7

Source: Integrated Postsecondary Education Data System, Financial Aid survey, 2000 to 2015, National Center for Education Statistics.

Kentucky universities' percentage change in total in-state enrollment increased by less than in Southern states' universities but more than surrounding states' universities. Kentucky universities' percentage change in total out-of-state enrollment increased by more than in Southern and surrounding states' universities.

Table 3.9 compares the percentage change in first-time, full-time enrollment at Kentucky universities from AY 2000 to AY 2015 against the percentage change in enrollment at universities in surrounding states and universities in Southern states. In-state enrollment at Kentucky universities increased less than in-state enrollment at Southern universities, but more than in-state enrollment at universities in surrounding states. Out-of-state enrollment increased more both comparison groups.

Table 3.9
Percentage Change In First-Time,
Full-Time Enrollment
Academic Years 2000 To 2015

Type Of Student	Group	% Change
In-state	Kentucky	26.3%
	Surrounding states	16.6
	Southern states	38.7
Out-of-state	Kentucky	72.2
	Surrounding states	47.2
	Southern states	39.1

Note: The percent changes use sums for 81 universities in the surrounding states for 2000, 83 universities in 2001, and 84 universities for 2002 to 2015; and 190 universities in the Southern states for 2000, 192 universities for 2001, 193 universities for 2002 to 2014, and 191 universities for 2015. Kentucky State's 2000 enrollment was not available, so 2002 enrollment was used.

Source: Integrated Postsecondary Education Data System, Student Financial Aid survey, 2000 to 2015, National Center for Education Statistics.

¹ National Center for Education Statistics. "Statutory Requirements for Reporting IPEDS Data." *Integrated Postsecondary Education Data System*. n.d. Web. July 7, 2017.

² National Center for Education Statistics. "2015-2016 Survey Materials: Glossary." *Integrated Postsecondary Education Data System*. Dec. 8, 2015. Web. Oct. 3, 2017. Pp. 9, 13, 14.

³ Kentucky. Council on Postsecondary Education. "2017-18 Tuition Setting Timeline and Tuition and Mandatory Fee Policy." Feb. 3, 2017. Pp. 6, 7.

⁴ *Ibid.* P. 6.

⁵ Shannon Rickett, Assistant Vice-President for Government Relations, University of Louisville. Email to Ron Carson. Nov. 21, 2017.

⁶ Shannon Rickett, Assistant Vice-President for Government Relations, University of Louisville. Email to Ron Carson. Nov. 16, 2017.

⁷ National Center for Education Statistics. "2017-18 Survey Materials, FAQ." *Integrated Postsecondary Education Data System*. n.d. Web. Oct. 13, 2017

Chapter 4

Net Price

This chapter begins by exploring college affordability research. It then summarizes how the net price of universities in Kentucky has changed from academic years 2007 to 2015. This chapter will then explore how the net price of universities in Kentucky differs from the universities of the eight surrounding states (Illinois, Indiana, Ohio, Missouri, Tennessee, Virginia and West Virginia), and the 16 member states that belong to the Southern Regional Education Board (SREB). This chapter will then look at net price as it relates to income for universities in Kentucky and its surrounding states. This is followed by a look at how both tuition and fee revenue and state appropriations have changed over time for universities in Kentucky, and how universities' various budgeted operating expense categories relate to these revenue sources. Finally, this chapter will analyze how state support for universities in Kentucky has changed over time in relation to net cost in both Kentucky and its surrounding states.

Economic Research

College affordability is more complex than just published college prices. It involves personal preferences and priorities, income levels of individuals and families, and potential future financial returns. Another consideration is the income that students forego while in school.

Despite the rising costs of obtaining a college degree, the 21st century economy requires more college - educated workers, particularly within minority populations.¹ Research shows that attending college has both social and economic returns for college graduates. Angrist and Chen (2011) estimated that college graduates might experience an income that is 7 percent greater than noncollege graduates.² Furthermore, research shows that college graduates may receive nonmonetary benefits, such as an increase in health consciousness, when controlling for income.³

Table 4.1 shows the Kentucky state median earnings in the past 12 months (2016 dollars) by educational attainment for the population 25 years and over.

Table 4.1
Kentucky Annual Median Earnings
By Educational Attainment, Age 25 Years And Older (In 2016 Dollars)
2006 And 2016

Year	Less Than High School	High School Graduate (Or Equivalent)	Some College Or Associates Degree	Bachelor's Degree	Graduate Or Professional Degree
2006	\$20,862	\$28,982	\$34,622	\$48,339	\$55,699
2016	20,974	28,372	32,301	47,601	56,285
% difference	0.54	-2.10	-6.70	-1.53	1.05

Note: Earnings are over the past 12 months. Rounded to the nearest whole dollar.

Source: US Census Bureau, 2016 American Community Survey, (2016 dollars)

Data shows over the last decade, individuals who have obtained at least a bachelor's degree earn twice as much annually than individuals with only a high school education, on average.

Those who have at least a bachelor's degree earn nearly twice as much as those with high school degrees or the equivalent, on average. The table also shows that median income has remained flat or decreased for each education attainment level.

Despite the economic benefit of a college education, total undergraduate enrollment at Kentucky's postsecondary institutions has remained flat over that same period.⁴ Researchers have explored potential reasons for why individuals may forgo the potential economic returns that result from acquiring a college education. Researchers have looked at the demand for postsecondary education as it relates to price, or more specifically, how the price or cost of obtaining a postsecondary education affects a student's decision of whether to enroll in college.

Research shows that as the price of attending college increases, the probability of enrollment decreases. Low income and minority students are more responsive to changes in price.

Based on an analysis of over 20 studies on the relationship between price and enrollment, as price goes up, the probability of enrollment tends to go down.⁵ Research shows that the probability of enrollment differs among different cohorts of students. Higher family income is associated with a greater probability that a child will both enter and graduate from college compared to families at the bottom of the income distribution.⁶ Research indicates minority students are more price sensitive to college costs than white students are.⁷

Low-income and minority students are more responsive to changes in price.⁸ A specific finding is that eligibility for \$1,000 of subsidy increases college attendance rates by about 4 percent for both low-income and minority students. The author also finds that enrolled students with the assistance of aid are more likely to remain enrolled and complete a degree program.⁹

Average Net Price Of In-State Students

The analysis for this report uses the published price and net price definitions from IPEDS.

Potential students face two prices when making the decision to enroll in postsecondary education: published and net price. The following analysis of the published and net price of universities in Kentucky uses data from the National Center for Education Statistics' (NCES) Integrated Postsecondary Education Data System (IPEDS) Student Financial Aid and Net Price Survey.¹⁰ The IPEDS data set consists of data reported by CPE, which collects the data from Kentucky's postsecondary education institutions.

The average net price is the total cost of attendance taking into account the average amount of federal, state or local, institutional grant and scholarship. It only includes those students that are paying in-state tuition.

Net price is the total cost of attendance minus the value of the average amount of federal, state or local, and institutional grant and scholarship aid. It only includes those students that are paying in-state tuition. The net price or "true" cost of attending college is the price that students will actually pay

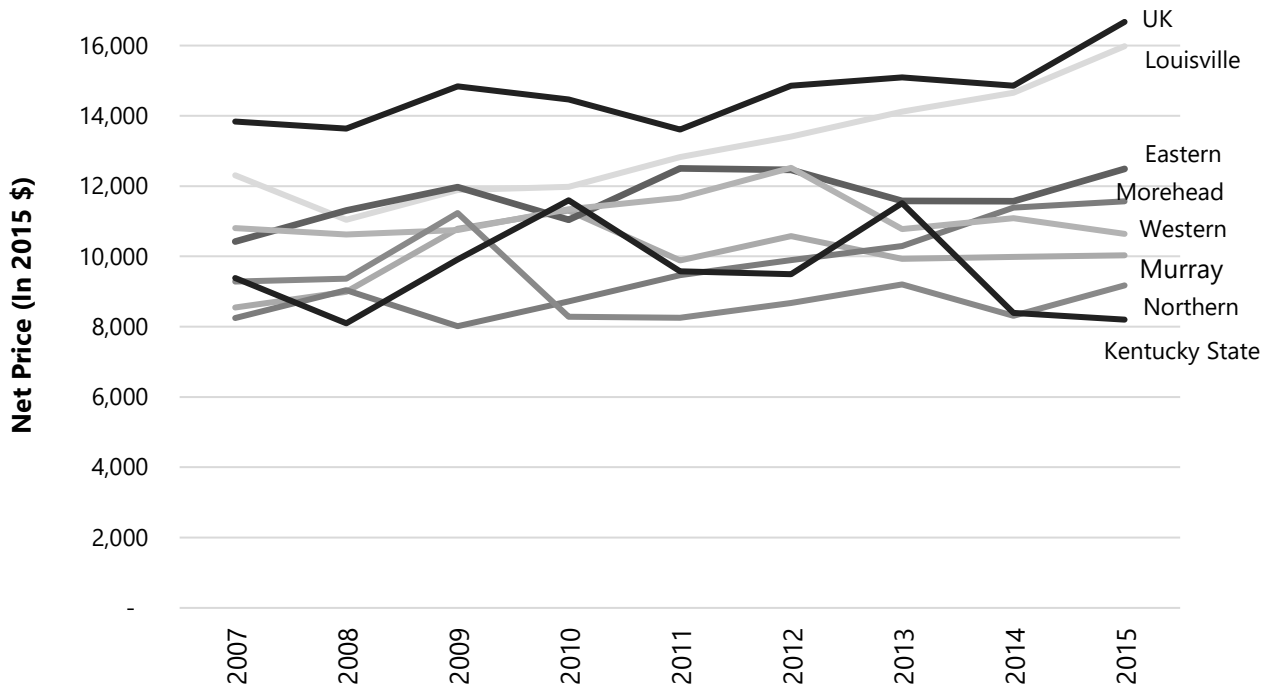
IPEDS defines net price more narrowly, basing its calculation on a weighted average for room and board and other expenses of the university's students. The net price variable became available beginning in AY 2009 (with data for the 2 previous academic years available).^a

Figure 4.A displays the average net price (2015 dollars) for in-state students of universities in Kentucky from AY 2007 to AY 2015.^b

^a The Higher Education Opportunity Act (HEOA) of 2008 required universities to report net price. The act also aimed to provide greater transparency of the actual price students may be paying through their college navigator tool.

^b Average net price is defined as subtracting average total aid from total cost of attendance. Total cost of attendance is the sum of published tuition and fees, books and supplies and a weighted average for room and board and other expenses. Average total aid minus the total cost of attendance is divided by the total number of students.

Figure 4.A
Average Net Price Of In-State Students Attending Kentucky Universities
(In 2015 Dollars)
Academic Years 2007 To 2015



Source: Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid and Net Price Survey, National Center for Education Statistics (NCES), authors calculations (2015 dollars)

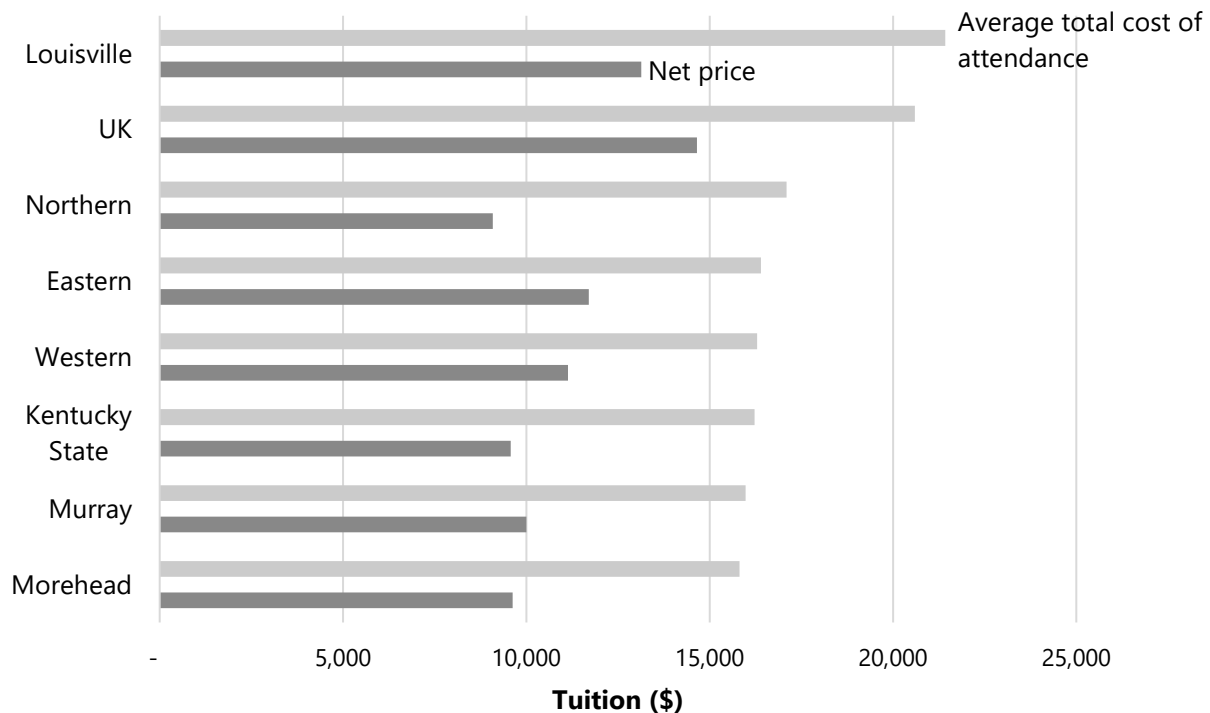
The average net price for regional comprehensive universities in Kentucky did not increase by as much as for research universities.

The net price at UK increased from \$13,842 in AY 2007 to \$16,673 in AY 2015, a 20.5 percent increase. At Louisville, the net price increased from \$12,305 in AY 2007 to \$15,981 in AY 2015, a 29.9 percent increase.

For comprehensive universities, the average net price increased the most at Morehead, from \$8,246 in 2007 to \$11,568 in 2015, a 40.3 percent increase. Net price also increased by 19.9 percent at Eastern and 17.4 percent at Murray. Net price decreased by 1.5 percent at Western, 1.2 percent at Northern, and 12.5 percent at Kentucky State.

Figure 4.B displays the average net price of in-state students and average total cost of attendance, in 2015 dollars, for universities in Kentucky from AY 2007 to AY 2015. The graphs are in order of greatest university average total cost of attendance.

Figure 4.B
Average Net Price Of In-State Students And Average Total Cost Of Attendance For Kentucky Universities (In 2015 Dollars) Academic Years 2007 To 2015



Source: Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid and Net Price Survey, National Center for Education Statistics (NCES) in 2015 dollars

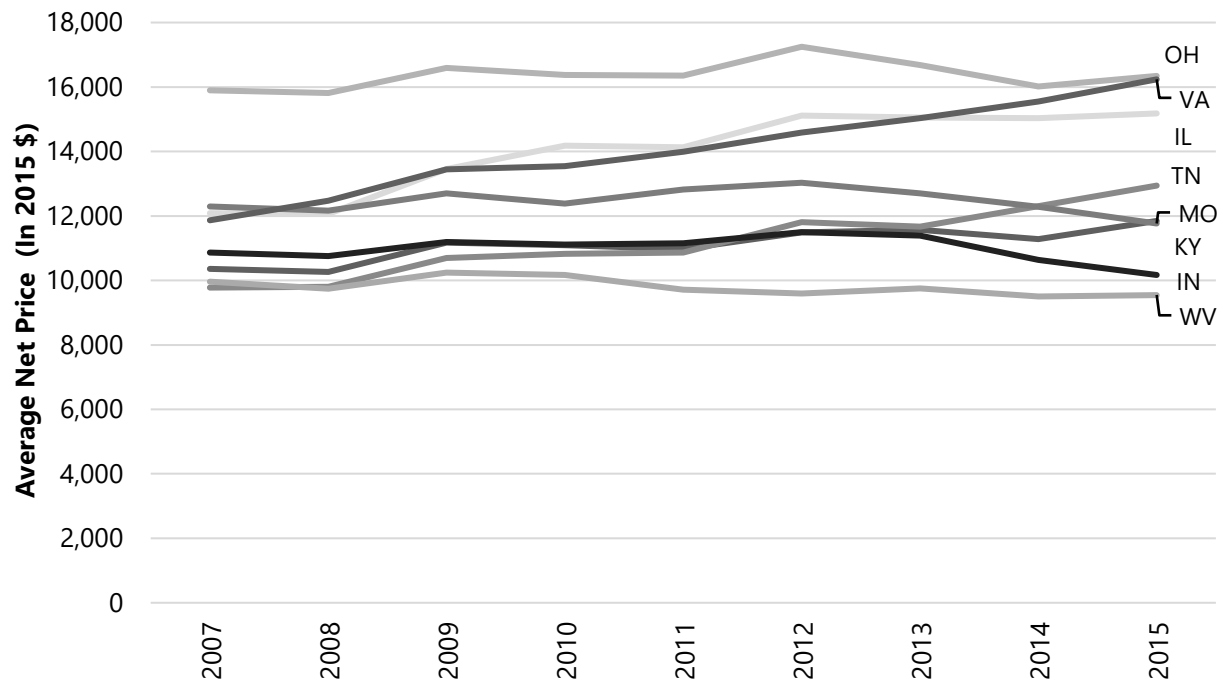
Kentucky had a lower average net price than four of its seven surrounding states from AY 2007 to AY2015.

Louisville has the greatest difference in average net price (\$21,428) and average total cost of attendance (\$13,134) from 2007 to 2015 at \$8,294. UK’s average total cost of attendance was \$20,597 and its average net price was \$14,652, a difference of \$5,945.

Eastern had the smallest difference at \$4,690. Its average total cost of attendance was \$16,396, and its average net price was \$11,706. Northern had the smallest average net price from 2007 to 2015. Morehead had the smallest average total cost of attendance at \$15,818.

In comparison to the net price of surrounding states, universities in Kentucky are competitive, having a lower average net price than universities in four of seven surrounding states. Figure 4.C displays the average net price (2015 dollars) of in-state students attending universities in Kentucky compared to public universities in its surrounding states from academic year 2007 to academic year 2015.

Figure 4.C
Average Net Price Of In-State Students Attending Universities
In Kentucky And Surrounding States (In 2015 Dollars)
Academic Years 2007 To 2015



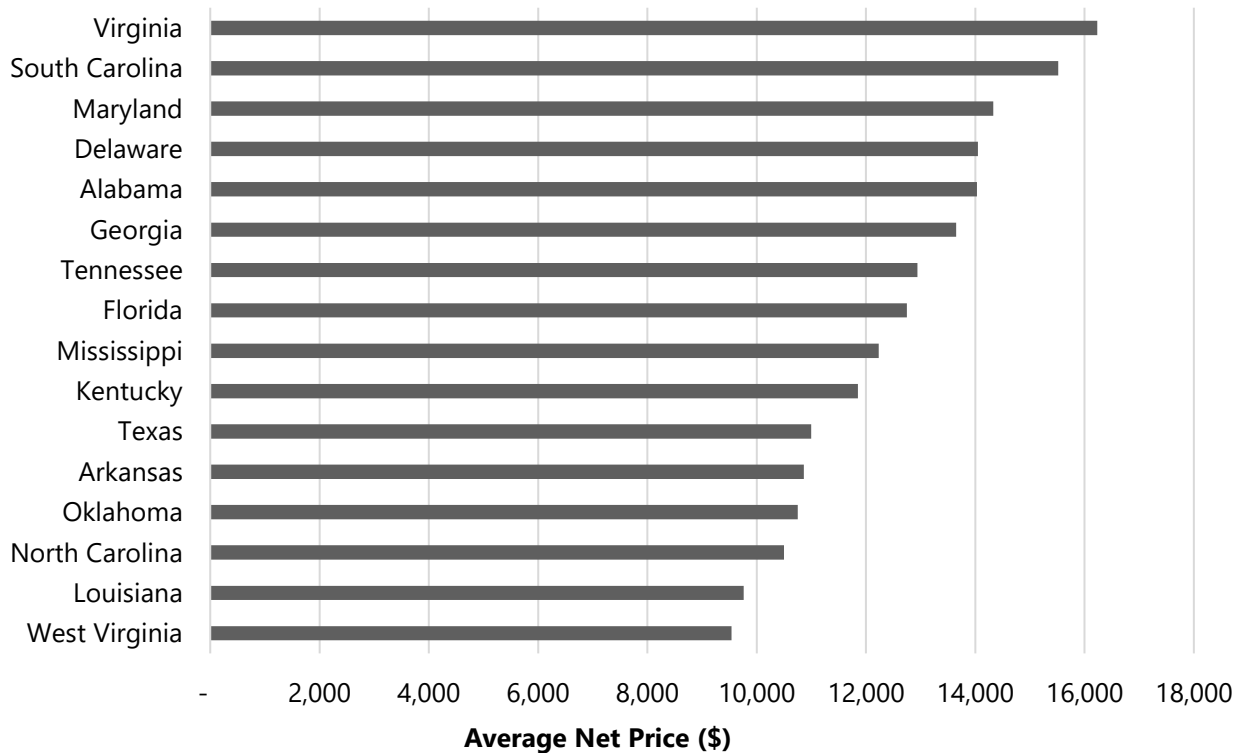
Note: Number of Universities: 92 OH 13; VA 15; IL 11; TN 9; MO 13; KY 8; IN 14; WV 9

Source: Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid and Net Price Survey, National Center for Education Statistics (NCES), authors calculations (2015 dollars)

Kentucky saw its average net price increase by 14.4 percent (\$10,354 in 2007 to \$11,846 in 2015) over the observed time. In contrast, only Tennessee (32.4 percent), Illinois (25.6 percent) and Virginia (36.8 percent) had net price increases greater from 2007 to 2015. Three states (Indiana, West Virginia and Missouri) saw their average net price decrease by 6.4 percent, 4.1 percent and 4.3 percent.

Kentucky had a greater average net price in 2015 than 6 of the 16 Southern member states. Figure 4.D displays the average net price for in-state students attending public universities in the Southern states in AY 2015.

Figure 4.D
Average Net Price Of In-State Students Attending Public Universities In Southern States
Academic Year 2015



Note: Total Universities: SREB 196 (AL 13; AR 9; DE 2; 11; GA 16; KY 8; LA 14; MD 11; MS 8; NC 16; OK 13; SC 12; TN 9; TX 30; VA 15; WV 9)

*Data Missing: Kennesaw State University (GA) 2015; Southern Polytechnic State University (GA) 2015

Source: Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid and Net Price Survey, National Center for Education Statistics (NCES), authors calculations (2015 dollars)

Universities in Kentucky had an average net price \$11,850 in 2015. This was less than the average net price of universities in surrounding states, \$13,084, and Southern states excluding Kentucky, \$12,543.

Kentucky universities had an average net price of \$11,850 in 2015. This was less than both the total average net price for both surrounding states (\$13,084) and Southern states excluding KY (\$12,543). Virginia had the highest average net price at \$16,230, while West Virginia had the lowest at \$9,540. In comparison to other surrounding states that are also Southern states, only West Virginia had a lower total average net price. Tennessee and Virginia had total average net prices of \$12,940 and \$16,230.

Average Net Price Of In-State Students And Income

Research shows that families with lower incomes will respond to changes in college prices differently. For example, families with annual incomes below \$40,000 respond to a \$1,000 grant by raising probability to enroll in school by 11 percent.

Research shows that families with different income levels respond to changes in the cost of attending college differently. Students from families with low incomes respond to a \$1,000 grant by raising their probability of matriculation by about 11 percent, compared to 13 percent for medium low and medium high incomes, and 8 percent for high incomes).¹¹ This research shows that students and families with higher incomes are less responsive to changes in the price of college.^c

Table 4.2 displays the average net price of universities in Kentucky as a percentage of Kentucky's median household income from 2007 to 2015. The figures for average net price and Kentucky median household income were in nominal dollars.

Table 4.2
Average Net Price For In-State Students at Kentucky Universities As A Percentage Of Kentucky Median Household Income 2007 To 2015

	2007	2008	2009	2010	2011	2012	2013	2014	2015
UK	30.1	29.8	33.5	33.2	31.4	34.5	34.2	34.6	36.9
Louisville	26.7	24.1	26.9	27.5	29.6	31.1	32.0	34.1	35.3
Eastern	22.6	24.7	27.0	25.4	28.8	28.9	26.2	26.9	27.6
Kentucky State	20.4	17.7	22.4	26.6	22.1	22.0	26.1	19.5	18.1
Morehead	17.9	19.8	18.1	20.0	21.8	23.0	23.3	26.5	25.6
Murray	18.6	19.7	24.4	26.0	22.8	24.5	22.5	23.2	22.2
Northern	20.2	20.5	25.4	19.0	19.0	20.1	20.8	19.3	20.3
Western	23.5	23.2	24.3	26.0	26.9	29.0	24.4	25.8	23.5
Average	22.5	22.4	25.2	25.5	25.3	26.6	26.2	26.2	26.2
Median income	\$40,267	\$41,538	\$40,072	\$40,062	\$41,141	\$41,752	\$43,399	\$42,958	\$45,215

Note: Net price and Kentucky median household income are in nominal dollars.

Source: U.S. Census Bureau, American Community Survey 1- year estimates , non-seasonally adjusted; Integrated Postsecondary Education System (IPEDS), National Center for Education Statistics (NCES), author's calculations

The cost to attend a public university became a larger share of household income for 7 of the 8 Kentucky universities from 2007 to 2015.

Kentucky State was the only public university that experienced a decrease, decreasing from the smallest increase from 20.4 percent in 2007 to 18.1 percent in 2015, a decrease of 2.2 percentage points. Louisville experienced the greatest increase from 26.7 percent in 2007 to 35.3 percent in 2015, an increase of 8.6 percentage points. The regional comprehensive universities had

^c The income brackets from the referenced study are as follows: low income (less than \$40,000); medium low income (\$40,000 to \$80,000); medium high income (\$80,000 to \$140,000); and high income (\$140,000 and greater),

increases of 3.6 (Murray), 5.0 (Eastern), 0.1 (Western), and 0.1 (Northern). Morehead had the second largest percentage point increase, and largest amongst the regional comprehensive universities of 7.7 percentage points. UK experienced an increase of 6.8 percentage points, but net price was the largest percentage of household income for every year from 2007 to 2015.

In 2007, net price as a percentage of median income ranged from 17.9 percent to 30.1 percent, with only research universities having net price as a percentage of greater than 25 percent. However, in 2015, net price as a percentage of median income ranged from less than 20 percent (Kentucky State) to above 35 percent (UK and Louisville).

As shown in Table 4.3, all surrounding states experienced increases in the ratio of average net price to median US household income from 2007 to 2015.

Table 4.3
Average Net Price Of In-State Students Attending A Public University As A Percentage Of US Median Household Income For Kentucky And Surrounding States 2007 To 2015

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Kentucky	17.9	17.9	20.1	20.4	20.6	21.7	21.8	21.0	21.2
Ohio	27.4	27.6	29.9	30.1	30.7	32.5	31.4	29.8	29.3
Tennessee	16.9	17.1	19.3	19.9	20.4	22.3	21.9	22.9	23.2
Indiana	18.7	18.8	20.2	20.4	21.0	21.7	21.4	19.8	18.2
Illinois	20.8	21.1	24.3	26.1	26.6	28.5	28.3	28.0	27.2
West									
Virginia	17.2	17.0	18.5	18.7	18.3	18.1	18.3	17.7	17.1
Missouri	21.2	21.2	22.9	22.8	24.1	24.6	23.9	22.9	21.1
Virginia	20.5	21.8	24.2	24.9	26.3	27.5	28.3	28.9	29.1
Average	20.1	20.3	22.4	22.9	23.5	24.6	24.4	23.9	23.3
Median income	\$50,740	\$52,029	\$50,221	\$50,046	\$50,502	\$51,371	\$52,250	\$53,657	\$55,775

Note: Net price and US median household income are in nominal dollars.

Source: U.S. Census Bureau, American Community Survey 1-year estimates, non-seasonally adjusted; Integrated Postsecondary Education System (IPEDS), National Center for Education Statistics (NCES) authors calculations

Average net Price as a percentage of US median household income increased by 3.4 percentage points between 2007 and 2015. This was greater than 4 of the 7 surrounding states. Indiana (0.5), Missouri (0.1) and West Virginia (0.0) experienced percentage point decreases over the observed time period.

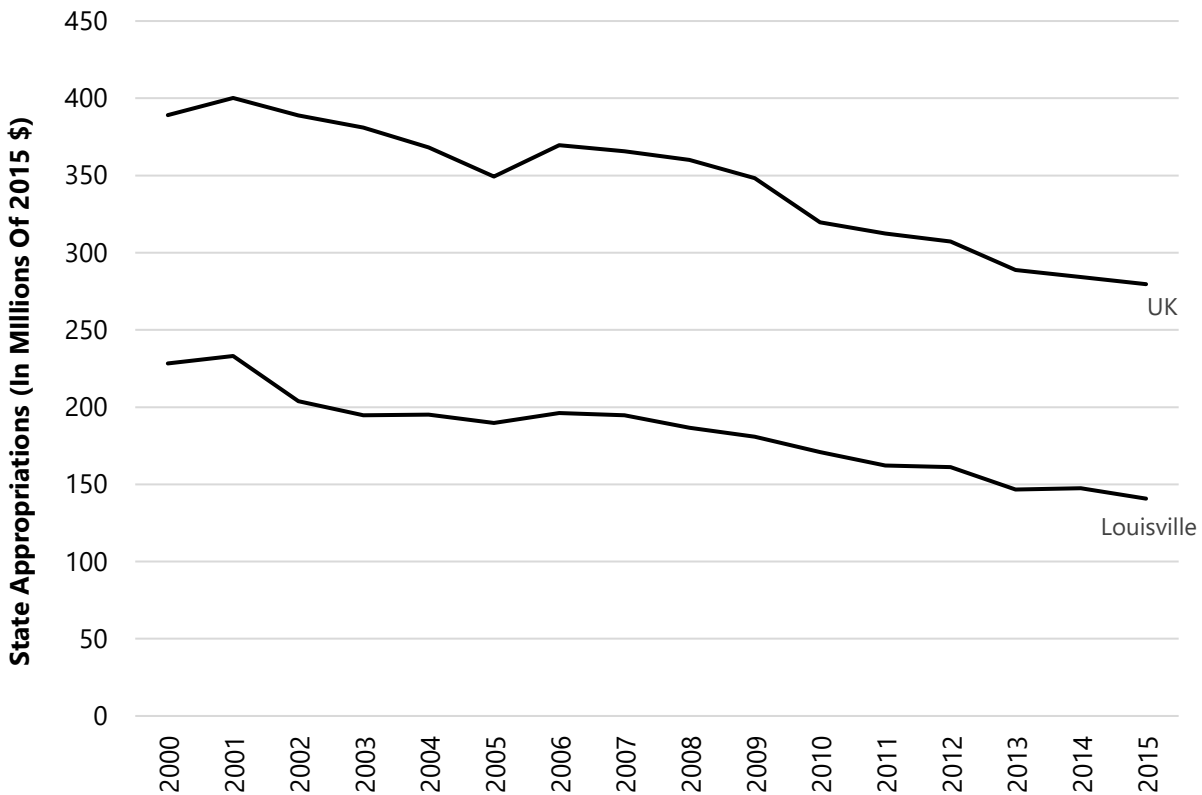
The US median household income increased from \$50,740 in 2007 to \$55,775 in 2015, an increase of 9.9 percent. The ratio of total average net price to U.S. median household income for Kentucky increased by 3.4 percentage points, increasing from 17.9 percent in 2007 to 21.2 percent in 2015. This percentage point increase was greater than 4 of the 7 surrounding states. The states that experienced increases greater than Kentucky were Virginia (8.7 percentage points), Illinois (6.4), and Tennessee (6.3). The state that experienced an increase that was less than Kentucky was Ohio (1.9). However, Ohio's ratio of net price to US median income as 8.1 percentage points greater in 2015. Indiana (0.5), West Virginia (0.0), and Missouri (0.1) experienced decreases over from 2007 to 2015. On average, Kentucky and the surrounding states experienced an increase of 3.2 percentage points from 2007 to 2015.

State General Fund Appropriations And Tuition And Fee Revenue

Figure 4.E displays the inflation - adjusted state general fund appropriations for UK and Louisville from FY 2000 to FY 2015^{d 12} IPEDS defines state appropriations as amounts received by universities through acts of the state legislative body for meeting current operating expenses (not for specific projects of programs). It is important to note that the definition for state appropriations from IPEDS includes mandated programs. As a result, any comparisons between states may be imperfect because of difference in these mandated programs.

^d The state appropriations and tuition and fee revenue data used in this report come from the IPEDS Finance survey for FY 2000 to FY 2015. All universities analyzed used GASB accounting standards except for the SREB member state of Delaware, which uses FASB accounting standards.

Figure 4.E
State General Fund Appropriations For Kentucky Research Universities
(In Millions Of 2015 Dollars)
FY 2000 To FY 2015



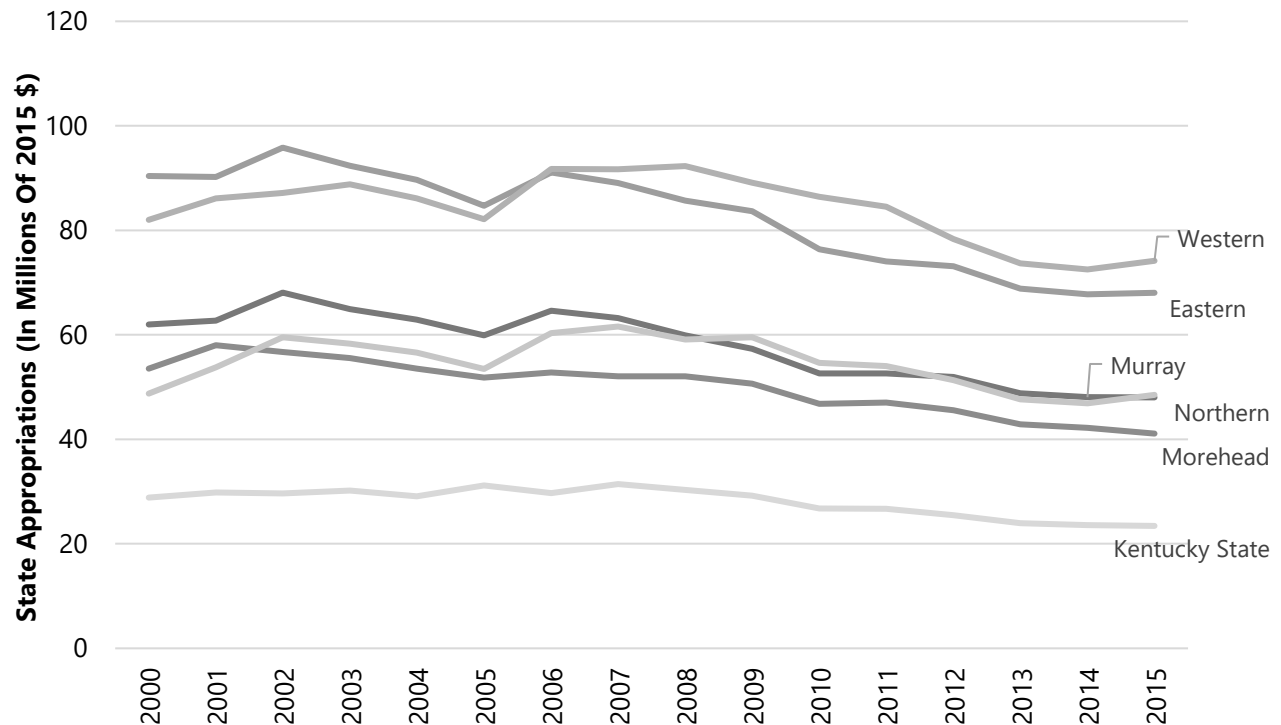
Source: Integrated Postsecondary Education Data System (IPEDS), Finance Survey, National Center for Education Statistics (NCES), authors calculations (2015 dollars)

Research universities in Kentucky experienced declines in state general fund appropriations from FY 2000 to FY 2015: 28.1 percent for UK and 38.4 percent from Louisville.

Both research universities saw their state general fund appropriated dollars decrease from FY 2000 to FY 2015. UK saw a decrease of 28.1 percent from fiscal year 2000 (\$389 million) to fiscal year 2015 (\$279.6 million) and Louisville saw a 38.4 percent decrease from FY 2000 (\$228.3 million) to FY 2015 (\$140.7 million).

Figure 4.F displays the inflation - adjusted state general fund appropriations dollars for regional comprehensive universities from FY 2000 to FY 2015.

Figure 4.F
State General Fund Appropriations For Regional Comprehensive
Universities In Kentucky (In Millions Of 2015 Dollars)
FY 2000 To FY 2015



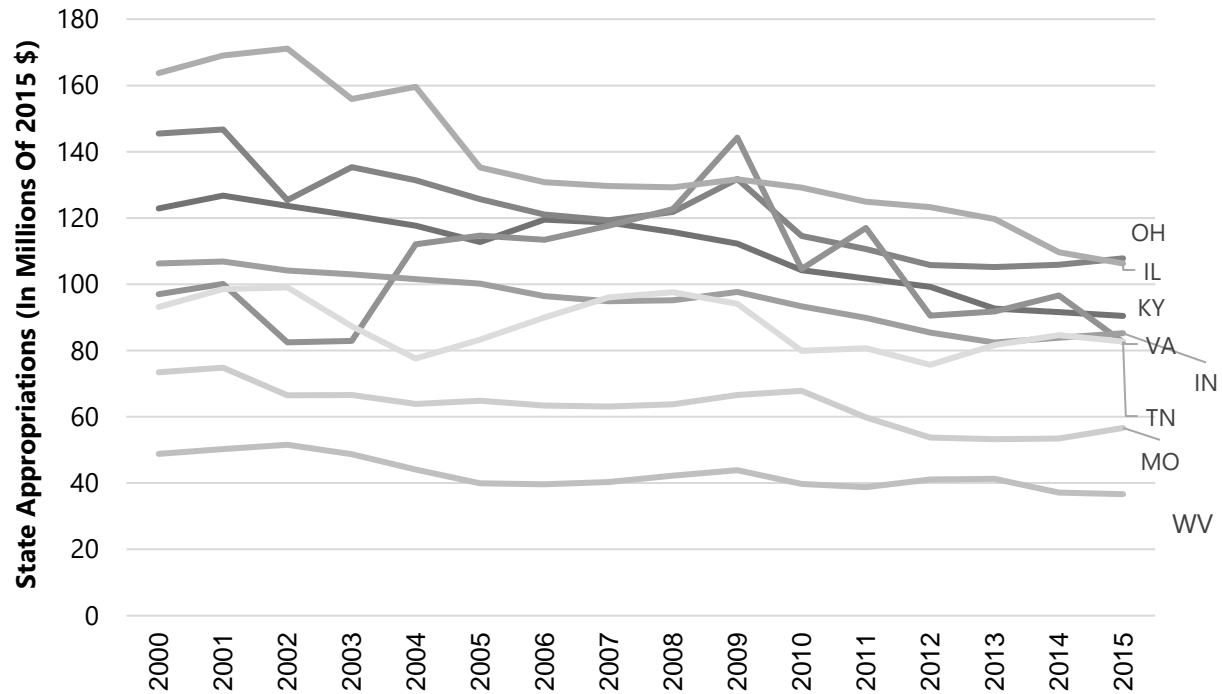
Source: Integrated Postsecondary Education Data System (IPEDS), Finance Survey, National Center for Education Statistics (NCES), authors calculations (2015 dollars)

All Kentucky regional comprehensive universities experienced decreases in state general fund appropriations from FY 2000 to FY 2015. Northern, experienced the smallest percentage decrease, 0.4 percent.

Northern experienced the smallest decrease from FY 2000 to FY 2015 of 0.4 percent, decreasing from \$48.7 million in FY 2000 to \$48.5 million in FY 2015. The other comprehensive universities saw percentage decreases in total state general fund appropriations from FY 2000 to FY 2015 as follows: 24.8 percent at Eastern, 9.6 percent at Western, 23.2 percent at Murray, 23.2 percent at Morehead, and 18.7 percent at Kentucky State.

All surrounding states experienced decreases in their state general fund appropriations from FY 2000 to FY 2015. Figure 4.G displays the average total state general fund appropriations for Kentucky and public universities in its surrounding states from FY 2000 to FY 2015. As previously mentioned, state mandated programs may make any comparisons of state general fund appropriations imperfect.

Figure 4.G
Average State General Fund Appropriations For Public Universities in
Kentucky And Surrounding States (In Millions Of 2015 Dollars)
FY 2000 To FY 2015



Note: Number of Universities: 92 OH 13; VA 15; IL 11; TN 9; MO 13; KY 8; IN 14; WV 9
 *Data Missing: University of Cincinnati – Main Campus (OH) 2002; University of Tennessee – Chattanooga (TN) 2002-03; University of Tennessee – Knoxville (TN) 2002-03; University of Tennessee – Martin (TN) 2002-03
 Source: Integrated Postsecondary Education Data System (IPEDS), Finance Survey, National Center for Education Statistics (NCES), authors calculations (2015 dollars)

In Kentucky, total average state appropriations decreased 26 percent from FY 2000 to FY 2015. Among surrounding states, only Illinois experienced a larger decrease.

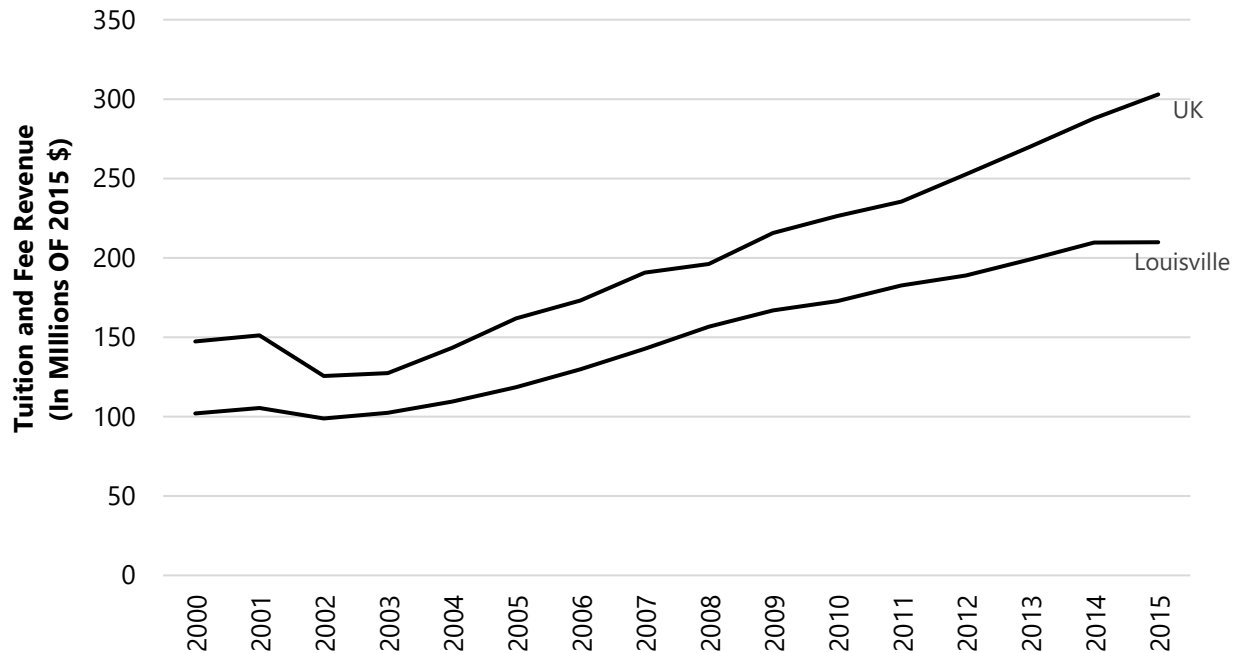
Kentucky experienced a 26.4 percent decrease in its average total state general fund appropriations from FY 2000 to FY 2015, decreasing from \$122.9 million in FY 2000 to \$90.4 million in FY 2015. Illinois was the only state that saw a larger decrease at 35.1 percent. The other states experienced decreases as follows: Ohio, 25.9 percent; Tennessee, 15 percent; Indiana, 20 percent; West Virginia, 24.9 percent; Missouri, 22.9 percent; and Virginia, 11.2 percent.

Figures 4.F and 4.G show that state general fund appropriations have decreased for all universities in Kentucky since FY 2000. As state support for postsecondary education has decreased, tuition and fee revenue has increased.

Figures 4.H and 4.I display the inflation - adjusted tuition and fee revenue at Kentucky’s research and regional comprehensive

universities from FY 2000 to FY 2015.^e Please note that an increase in tuition revenue is the result of both enrollment changes and rate increases.

Figure 4.H
Tuition And Fee Revenue For Kentucky Research Universities
(In Millions Of 2015 Dollars)
FY 2000 To FY 2015



Source: Integrated Postsecondary Education Data System (IPEDS), Finance Survey, National Center for Education Statistics (NCES), authors calculations (2015 dollars)

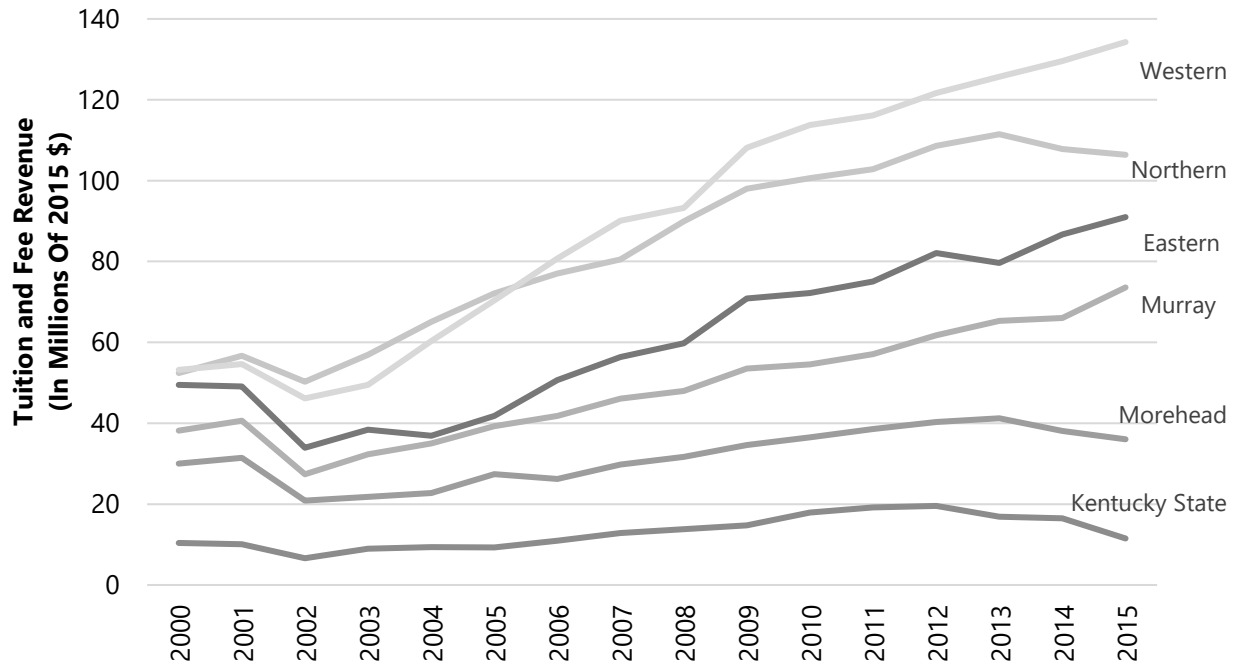
At UK and Louisville, tuition and fee revenues increased by 105.6 percent from FY 2000 to FY 2015.

At both research universities, tuition and fee revenue increased by 105.6 percent from FY 2000 to FY 2015. Tuition and fee revenue increased at UK from \$147.3 million in FY 2000 to \$302.9 million in FY 2015. At Louisville tuition and fee revenue increased from \$102.1 million in FY 2000 to \$209.8 million in FY 2015

The greatest annual percentage increase occurred at UK from FY 2004 to FY 2005 when tuition and fee revenue increased by 13 percent, and at Louisville from FY 2006 to FY 2007 when it increased by 10 percent.

^e IPEDS defines tuition and fee revenue as the revenue net of refunds and discounts for educational purposes and excluded room, board, and other expenses charged by auxiliary enterprises.

Figure 4.I
Tuition And Fee Revenue For Kentucky Regional Comprehensive Universities
(In Millions Of 2015 Dollars)
FY 2000 To FY 2015



Source: Integrated Postsecondary Education Data System (IPEDS), Finance Survey, National Center for Education Statistics (NCES), authors calculations (2015 dollars)

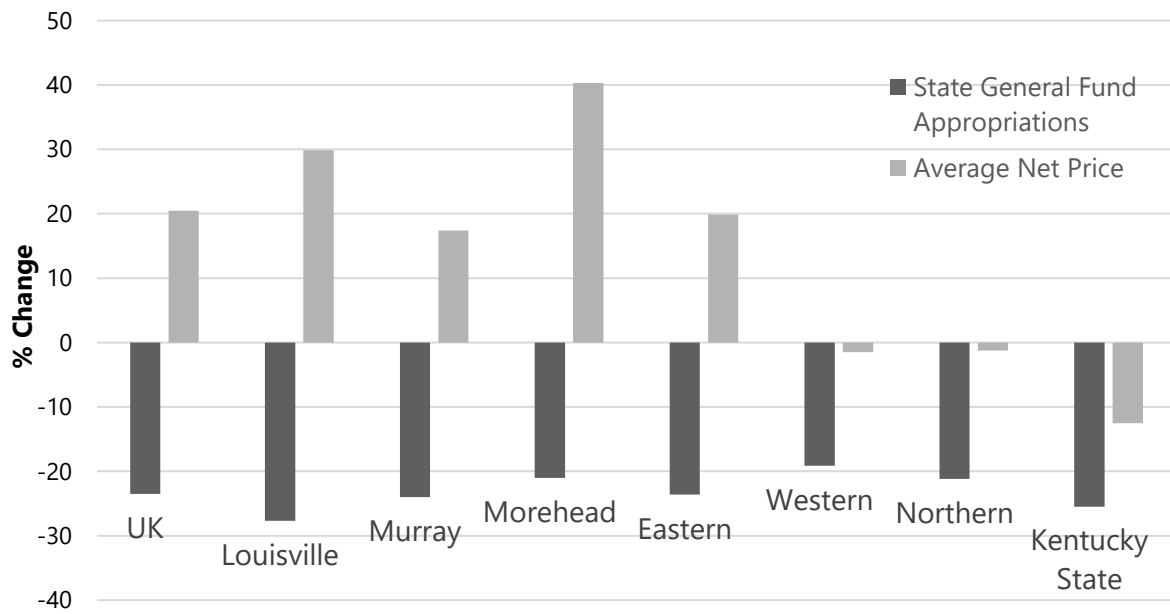
Tuition and fee revenue also increased at all regional comprehensive universities in Kentucky from FY 2000 to FY 2015.

Tuition and fee revenue also increased at all Kentucky regional comprehensive universities from FY 2000 to FY 2015 by 77.2 percent, on average. Western’s tuition and fee revenue increased by 152.4 percent, the largest increase. Kentucky State’s increased the least amount, 11.2 percent. Increases in tuition and fee revenue of the other regional comprehensive universities were 83.7 percent (Eastern), 20.3 percent (Morehead), 92.6 percent (Murray), and 103.1 percent (Northern).

The decreases in state general fund appropriations to universities and the subsequent increases in tuition and fee revenue aided in the higher net prices that prospective college graduates will face. As a result, the data shows a growing divide between net price and state appropriations from FY 2007 to FY 2015.

Figure 4.J shows an inverse relationship between the change in average net price and state general fund appropriations for 5 of 8 Kentucky universities from FY 2007 to FY 2015. Northern, Western and Kentucky State were the only universities with percentage declines in both state general appropriations and average net price from 2007 to 2015.

Figure 4.J
Percentage Change In In-State Student Average Net Price To State General Fund Appropriations For Kentucky Universities (In 2015 dollars) 2007 To 2015



Source: Integrated Postsecondary Education Data System (IPEDS), Student Financial Aid and Net Price Survey, National Center for Education Statistics (NCES), authors calculations (2015 dollars)

University Revenue And Expenses

Universities use their revenue sources to provide an education to students, but also to fulfill their mission statements of providing an experience that will transform student's lives for the future. Universities also collect revenue in forms of student fees, interest income, auxiliary expenses, education-related sales and services, federal, state and private grants and contracts, and indirect reimbursements. Broader expense categories that universities use these revenue sources on include instruction, institutional support, student services, academic support, and student financial aid.^f It is not possible to indicate what share of specific revenue sources are allocated to specific expense categories at a specific time during the fiscal year. As a result, University budget officials provided data of the unrestricted current balances of their original budget from FY 2006 to FY 2017. The data include the total for each public funds revenue source and how funds are expensed within the expense categories that make up university balance sheets. It is important to note that the data provided only shows current unrestricted funds. However, universities can also use restricted sources for these expense categories and may use reserve funds from the previous year fund balance.

Table 4.4 displays the ratio of expense category to total public funds revenue for each university from FY 2006 to FY 2017.^g

^f University budget officials also provided data on educational and general expenses for research, libraries, operation and maintenance, and transfers and debt services but these were not referenced in our analysis. The total public funds revenue does include the revenue for these expenses. IPEDS provides definitions for the university expense categories. Instruction includes expenditures for departmental research and public services that is not separately budgeted and general academic instruction conducted by the teaching faculty for the institution's students; student services include funds expended for admissions, registrar activities, and activities whose primary purpose is to contribute to students' emotional and physical well-being; academic support includes expenditures for the support services that are integral part of the institution's primary mission of instruction, research, or public service; institutional support includes expenditures for the day-to-day operational support of the institution; and student financial aid includes expenditures made in the form of outright grants-in-aid, tuition and fee waivers, prizes and trainee stipends to individuals enrolled in formal undergraduate coursework.

^g Total public funds revenue also includes revenue from categories not referenced in the table. Categories not referenced include research, public service, libraries, operations and maintenance of plant, other, and transfer and debt services. The other category is a unique expense for Louisville that includes expenses toward auxiliary services, student services, and the Quality and Charity Care Trust Agreement.

Table 4.4
Total Expenses As A Percentage Of Total Public Funds Revenue By Expense Category
FY 2006 To FY 2015

	Instruction		Student Services		Academic Support		Institutional Support		Student Financial Aid	
	% Total Revenue 2006	% Total Revenue 2017	% Total Revenue 2006	% Total Revenue 2017	% Total Revenue 2006	% Total Revenue 2017	% Total Revenue 2006	% Total Revenue 2017	% Total Revenue 2006	% Total Revenue 2017
UK	29.1	28.6	2.7	3.2	7.1	5.8	14.1	10.2	6.2	9.6
Louisville	34.8	34.9	5.0	6.0	11.4	13.1	12.0	11.5	9.2	12.3
Eastern Kentucky State	40.6	37.5	7.8	8.4	6.7	10.7	18.0	12.6	10.4	16.4
Morehead	25.8	24.0	22.5	10.9	2.8	17.4	11.6	19.3	4.2	10.0
Murray	41.6	28.7	9.0	13.3	7.3	6.9	13.7	13.1	9.5	15.3
Northern	36.8	33.4	9.1	8.3	4.0	3.0	10.6	14.3	18.6	25.6
Western	39.5	33.3	7.5	10.4	9.8	10.0	14.4	13.5	6.1	12.9
	39.8	34.8	1.2	1.1	11.1	11.6	15.0	16.3	4.7	10.6

Note: Expense Categories not included are research, libraries, operations and maintenance of plant, transfers and debt services. Total public funds revenue does not include restricted funds and previous years fund balances that may be expensed on these categories.

Source: Kentucky Public Postsecondary University Budget Officials, author's calculations

The largest expense at all Kentucky universities is instruction. However, the percentage contributed decreased for all universities (except Louisville) from FY 2006 to FY 2017.

Table 4.4 shows that in FY 2006 and FY 2017, all universities expensed the largest percentage of total public funds revenue on instruction. However, the percentage contributed decreased for all universities (except Louisville) from FY 2006 to FY 2017. Morehead experienced the greatest decline of 12.9 percentage points. The second largest expense varied among the universities in Kentucky in FY 2006 and FY 2017. From FY 2006 to FY 2017, student financial aid increased as a share of total public funds revenue by at least 3.4 percentage points for all eight universities.

On average, expenses on student financial aid increased 5.4 percentage points from FY 2006 to FY 2017 at universities in Kentucky. Murray was the highest increase of 7 percentage points.

Kentucky State had two of the greatest percentage point increases from FY 2006 to FY 2017. Institutional support increased by 7.7 percentage points; and academic support increased 14.6 percentage points. Kentucky State's contribution towards student services decreased 11.6 percentage points from FY 2006 to FY 2017.

¹ William Mark Zumeta. *Financing American Higher Education in the Era of Globalization*. Boston. Harvard Education Press. 2012.

² Joshua Angrist and Stacey H. Chen. "Schooling and the Vietnam-Era GI Bill: Evidence from the Draft Lottery." *American Economic Journal: Applied Economics* 3 (April 2011): 96-119

³ Philip Oreopoulos and Kelli G. Salvanes. "Priceless: The Nonpecuniary Benefits of Schooling." *Journal of Economic Perspectives* 25.1 (2011): 59-184

⁴ Kentucky Council on Postsecondary Education (CPE)

⁵ Donald E. Heller. "Student Price Response in Higher Education: An Update to Leslie and Brinkman." *The Journal of Higher Education* 68.6 (1997): 624-59

⁶ Martha J. Baily and Susan M. Dynarski. "Gains and Gaps: Changing Inequality in U.S. College Entry and Completion." *National Bureau of Economic Research*. Working Paper No. 17633. (2011). Web. July 2017.

⁷ Thomas Kane. "College Entry by Blacks since 1970: The Role of Tuition, Financial Aid, Local Economic Conditions, and Family Background." Unpublished doctoral dissertation, Harvard University. (1994).

Donald E. Heller. "Student Price Response in Higher Education: An Update to Leslie and Brinkman." *The Journal of Higher Education* 68.8. (1997): 624-59

⁸ Wilbert Van der Klaauw. "Estimating the Effect of Financial Aid Offers on College Enrollment: A Regression-discontinuity Approach." *International Economic Review*. 43.4. (2002): 1249-87.

⁹ Susan M. Dynarski. "Does Aid Matter? Measuring the Effects of Student Aid on College Attendance and Completion." *National Bureau of Economic Research* Working Paper 7422. (1999). Web. June 2017.

¹⁰ US Integrated Postsecondary Education System (IPEDS) Student Financial Aid and Net Price Survey. Web. Nces.ed.gov/ipeds. June 2017

¹¹ Christopher Avery and Caroline M. Hoxby. "Do and Should Financial Packages Affect Students' College Choices?" *National Bureau of Economic Research* Working Paper No 9482. (2003). Web. Sept 2017.

¹² US Integrated Postsecondary Education System (IPEDS) Student Finance Survey. Web. Nces.ed.gov/ipeds. June 2017.

Chapter 5

Financing Postsecondary Education

Student Financial Aid

Financial aid to assist students with costs of postsecondary education is awarded from three main sources: the federal government, state governments, and educational institutions.

Financial aid to assist students with the costs of postsecondary education is awarded from three main sources: the federal government, state governments, and educational institutions. The federal government offers grants, work-study, and loans. Grants are generally not repaid and are often based on financial need. Work-study allows students to earn income while working at the university. Loans are borrowed funds that are often repaid once the student has graduated or withdrawn from the university.

The state and universities in Kentucky offer these types of financial aid programs and also scholarships, tuition waivers, and conversion scholarships or grants.¹ Scholarships are awards that are not repaid and are typically competitively awarded to students based on ability, such as athletic, academic, or musical. Tuition waivers eliminate some tuition costs for students who meet certain criteria. Conversion scholarships or grants are awarded in exchange for providing services, such as working in a low-income area.^a

Federal

Financial aid programs have expanded in size, quantity, and accessibility since the Federal Higher Education Act of 1965.² Fuller (2014) provides a detailed overview of the act and its impact on financial aid.³ The act was reauthorized eight times to extend and update federal student financial aid programs. The reauthorization in 1972 created two new programs. Federal Supplemental Educational Opportunity Grants are awarded based on exceptional financial need. The Guaranteed Student Loan Program (Stafford Loan) pays interest payments on a student's loans while enrolled in school.

The federal government also created the State Student Incentive Grant Program (now referred to as the Leveraging Educational Assistance Partnership Program) to offer states matching grants for need-based financial aid programs. The reauthorization of 1980

^a Tuition waivers and conversion scholarships or grants are less common types of aid.

The Federal Higher Education Act of 1965 and its subsequent reauthorizations expanded federal student financial aid programs and provided funding for state financial need-based grants.

created the Basic Educational Opportunity Grants Program (Pell grants), providing grants to students based on financial need without future repayment. The Higher Education Act of 2008, the most recent reauthorization, created new requirements for student loan consolidation, repayment and forgiveness, and student loan accessibility.

Kentucky Programs

The Kentucky Higher Education Assistance Authority, the largest state financial aid program in Kentucky, administers grants, scholarships, and work-study programs. The Kentucky Higher Education Student Loan Corporation, the second largest, administers a state-supported, private loan program.

The Kentucky Higher Education Assistance Authority (KHEAA) and Kentucky Higher Education Student Loan Corporation (KHESLC) administer most financial aid programs in Kentucky. They were created to increase access to higher education for Kentuckians through financial and informational resources.⁴ KHEAA, created in 1966, is the largest source of state aid, administering programs that offer grants, scholarships, and work-study awards.⁵ Approximately 94 percent of student aid awards from KHEAA are funded by Kentucky Lottery revenue. The remaining funding is from the coal severance tax, Tobacco Settlement funds, federal funds, civil penalties under KRS 199.990, and KHESLC revenue.⁶ KHESLC, established in 1978, is the second largest source of financial aid in Kentucky. It administers the only private loan program in Kentucky supported by the state. KHESLC offers two loans for undergraduate students to refinance or consolidate private or federal loans: the Advantage Education Loan for students and the Advantage Parent Loan for parents of students who need to borrow to cover college expenses. Table 5.1 lists all state financial aid programs as of 2016.⁷

Table 5.1
Student Financial Aid Programs In Kentucky
2016

State Program Or Department	Type(s) Of Funding Offered
Higher Education Assistance Authority	Grants, scholarships, and work-study
Higher Education Student Loan Corporation	Loans
Commonwealth of Kentucky	Tuition waivers
Board of Nursing	Conversion scholarships/loans
Cabinet for Health and Family Services	Grants, job services and training, loans, conversion scholarships/loans, tuition wavers
Council on Postsecondary Education	Tuition waivers
Department for Environmental Protection	Conversion scholarships/loans
Department for Natural Resources	Scholarships
Department of Education	Conversion scholarships/loans
Department of Veterans Affairs	Tuition waivers
Education and Workforce Development Cabinet	Tuition discounts
National Guard	Tuition Assistance
Office of Vocational Rehabilitation	Grants
Revenue Cabinet	Tax deductions
Transportation Cabinet	Conversion scholarships/loans

Source: Kentucky Higher Education Assistance Authority.

Applying For Aid

Universities offer students an aid package that includes total financial aid from federal, state, institutional, and private sources.

Universities often offer financial aid when expected family contributions and savings are lower than college costs. Generally, students fill out the Free Application for Federal Student Aid if applying for any need-based financial aid. The federal government determines the amount based on information from the application. Universities then create a package of aid from all sources, including the university. Students are often required to get the maximum amount of federal aid before schools offer need-based aid. The application is typically not required for most scholarships, which are generally awarded separately from need-based aid. Table 5.2 is a list of financial aid awards offered by Kentucky’s public, 4-year universities in AY 2017.⁸

Table 5.2
Types Of Financial Aid Awards Offered
By Kentucky Public Four-Year Universities
Academic Years 2016 To 2017

Type	Description
Academic scholarships	Based on academic achievement.
Alumni scholarships	For students with a qualifying relative or spouse who is an alumnus of the university.
Athletic scholarships	Based on athletic talent or skills.
Discipline-specific scholarships	Offered by individual academic programs or schools within the university.
Diversity scholarships	Designed to enhance socioeconomic, racial, and age diversity on campus.
Emergency grants and loans	Based on financial need or circumstance.
Geographic-based scholarships	Based on area of residence.
International student scholarships	For international students meeting certain qualifications.
Leadership scholarships	For leaderships initiatives or skills.
Military/veteran scholarships	Based on military or veteran status.
Need-based grants	Based on financial need.
Organization-based scholarships	For affiliation or service within a specified organization.
Talent-based scholarships	For special skillsets or talents.
Transfer student scholarships	For transfer students meeting certain qualifications.
Work-Study Programs	Based on a work-service contract.

Source: Kentucky Higher Education Assistance Authority.

Total federal grant aid increased until AY 2011 and then decreased.

National Trends In Financial Aid

Total federal grant aid increased from AY 2006 to AY 2011 and then decreased beginning with 2011.⁹ The percentage of undergraduates receiving federal Pell Grants (financial need-based grants) increased from 25 to 37 percent from 2006 to 2011, and was 33 percent in 2016.

Nationally, state appropriations for postsecondary education increased until FY 2008 and then declined.

Nationally, state appropriations and support for financial aid programs varied during this period. Total inflation-adjusted state appropriations for postsecondary education for all states increased from FY 2004 to FY 2008 and then declined after the economic recession of 2008.¹⁰ State appropriations started to increase again in AY 2013 but have been slower to recover from the economic recession of 2008 when compared to other post-recession periods.¹¹ On average, the amount of inflation-adjusted state support for student financial aid increased from AY 2008 to AY 2015.¹² However, state aid per student was lower in FY 2015 than in FY 2008.¹³

Financial Aid In Kentucky

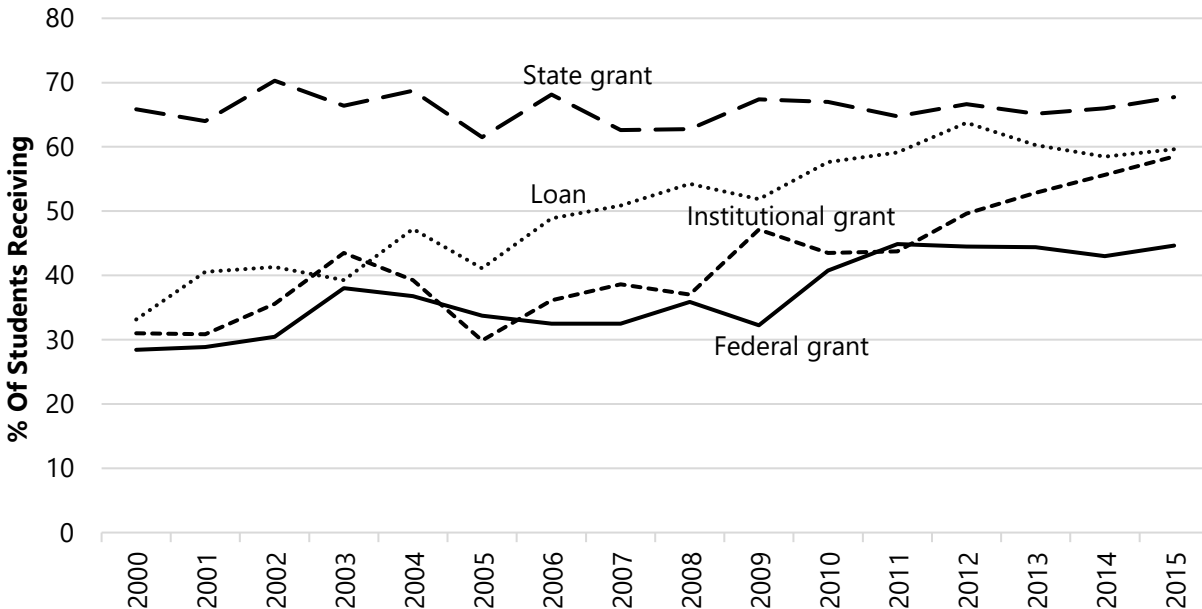
IPEDS provides data on the percentage of students receiving and average amount received from loans, and federal, state and local, and institutional grants for each university.

IPEDS collects data through the Student Financial Aid survey on the percentage of students receiving federal, state or local (hereafter referred to as state), and institutional grant aid awards by academic year.¹⁴ It also includes the percentage of students receiving a student loan and the average amount awarded for each type of award. As defined by IPEDS, federal grants are need-based and merit-based grants from federal agencies and federally sponsored programs. State grants are state and local monies awarded to universities for student financial aid programs. Institutional grants are scholarships and fellowships awarded by the university or departments within the university. Loans include all student loans from the federal government, universities, or private entities but not parent loans.

The largest percentage of students in Kentucky, nearly 70 percent in 2015, are funded by state grant aid. The percentage of students receiving other types of aid have increased significantly. From AY 2000 to AY 2015, the percentage of students receiving a federal grant increased from 29 to 44, the percentage of students receiving institutional grant aid increased from 31 to 59, and the percentage of students awarded a loan increased from 33 to 60.

The largest percentage of students in Kentucky receive state grant aid, but, on average, other sources of financial aid have been increasing over time. Figure 5.A compares the average percentage of students receiving each type of award at universities in Kentucky from AY 2000 to AY 2015. State grant aids were awarded to 60 to 70 percent of students in Kentucky over the period. In 2000, 66 percent of students received state grant aid; in 2015, 68 percent of students received state grant aid. During the same period, the average percentage of students receiving federal and institutional grant aid and loans also increased. From 2000 to 2015, the percentage of students receiving a federal grant increased from 29 to 44, the percentage of students receiving institutional grant aid increased from 31 to 59, and the percentage of students awarded a loan increased from 33 to 60.

Figure 5.A
Average Percentage Of Students Receiving Loans And Federal, State, And Institutional Grants At Universities In Kentucky Academic Years 2000 To 2015



Note: Kentucky State University data are missing in academic years 2000 to 2003.

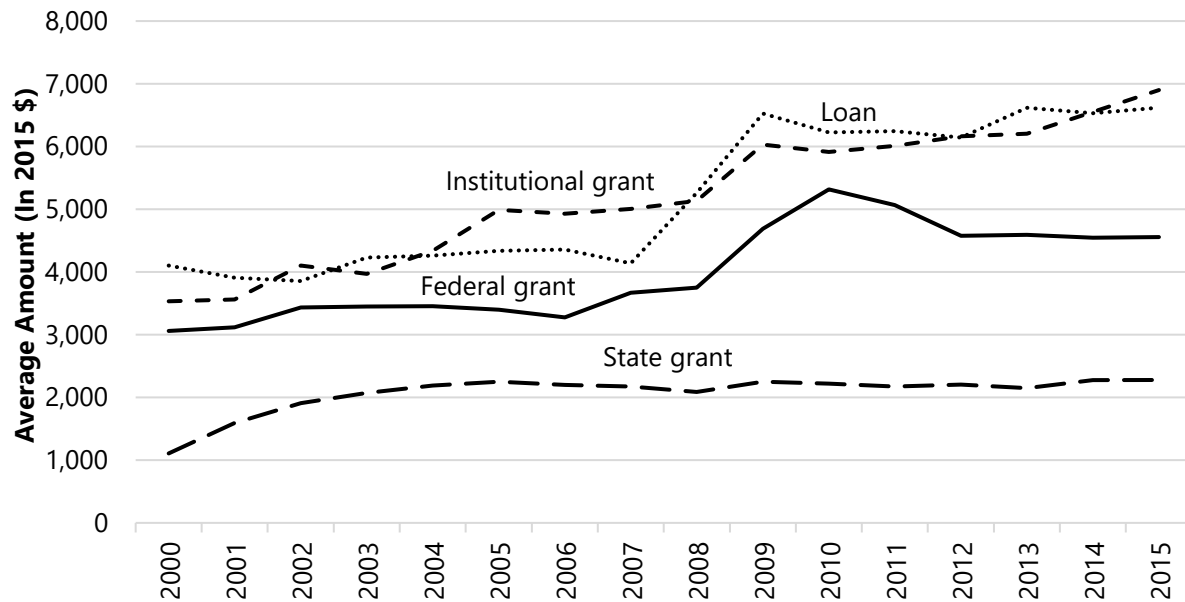
Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

The average amounts of state grant awards were lower than average amounts of other types of financial aid awards in Kentucky.

Although state grants were awarded to the largest proportion of students, state grant award amounts were the lowest of the four types of financial aid in Kentucky.^b Figure 5.B shows the average amount of loans and federal, state, and institutional grant aid from AY 2000 to AY 2015. After 2003, state grant aid ranged from \$2,000 to \$2,300, and remained relatively flat over time. The average amount of the other three types of financial aid increased over this period. The average amount of federal awards increased after the recession and remained steady after 2012, consistent with national trends. The average amounts of institutional grant aid and loan awards increased.

^b Data on Kentucky State University are missing for AY 2000 to AY 2003, which could affect the average value for years prior to AY 2004.

Figure 5.B
Average Amount Of Loans And Federal, State, And Institutional Grants
At Universities In Kentucky (In 2015 Dollars)
Academic Years 2000 To 2015



Note: Kentucky State University data are missing in academic years 2000 to 2003.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

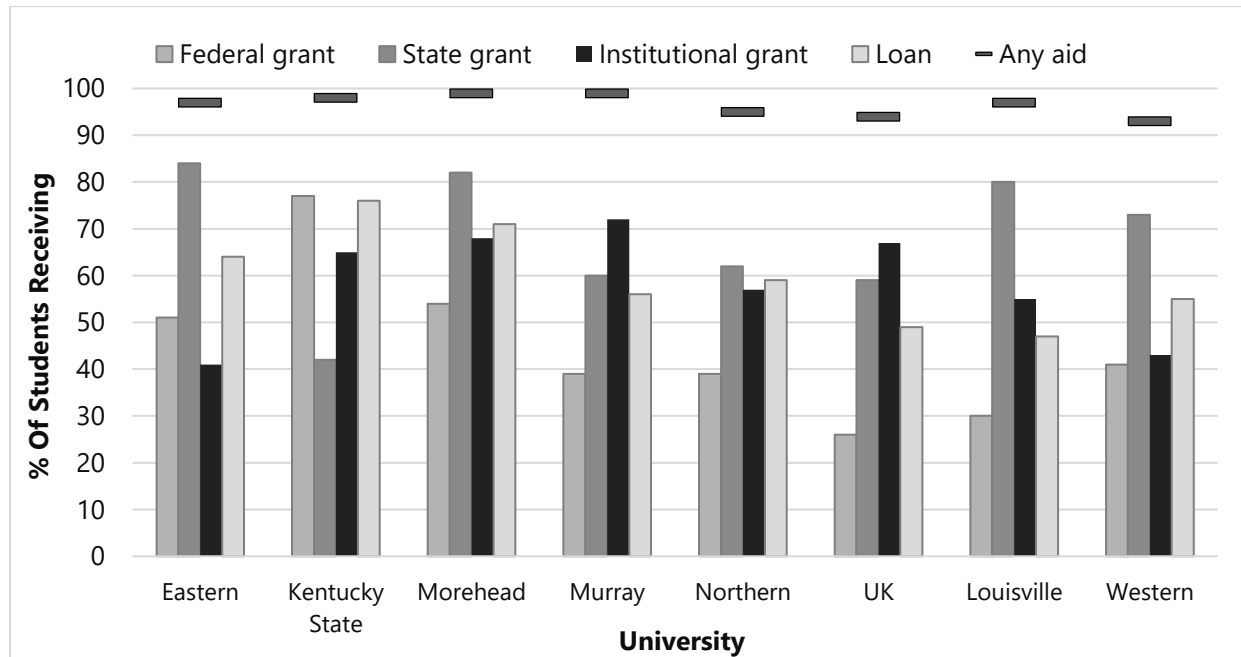
On average, at least 93 percent of student receive at least one type of financial aid at each university in Kentucky.

Approximately 93 percent or more of students at each Kentucky university received at least some type of financial aid in AY 2015, but the composition of each type of overall financial aid package varies by university. Figure 5.C shows the total percentage of students receiving any type of aid; loans; and federal, state, and institutional grants for each university in Kentucky in 2015. Any aid awarded is the percentage of students who were awarded any type of aid. This includes federal work study; loans; grants and scholarships from the federal, state, or local governments; institutional awards; and any other reported aid. The percentage of students receiving a federal grant varied the most from 26 percent (UK) to 77 percent (Kentucky State). The percentage of students receiving state grant aid ranged from 42 percent (Kentucky State) to 84 percent (Eastern). The percentage of students receiving institutional grant aid ranged from 41 percent (Eastern) to 72 percent (Murray). Finally, 47 percent (Louisville) to 76 percent (Kentucky State) of students took out loans.

In AY 2015, the largest percentage of students at five of Kentucky universities received state grant aid.

State grant aid awards funded more students at five universities: Eastern, Morehead, Northern, Louisville, and Western. At Murray and UK, more students received institutional grant aid than other types of financial aid. At Kentucky State, more students received a federal grant.

Figure 5.C
Percentage Of Students Receiving Financial Aid By Type At Universities In Kentucky Academic Year 2015

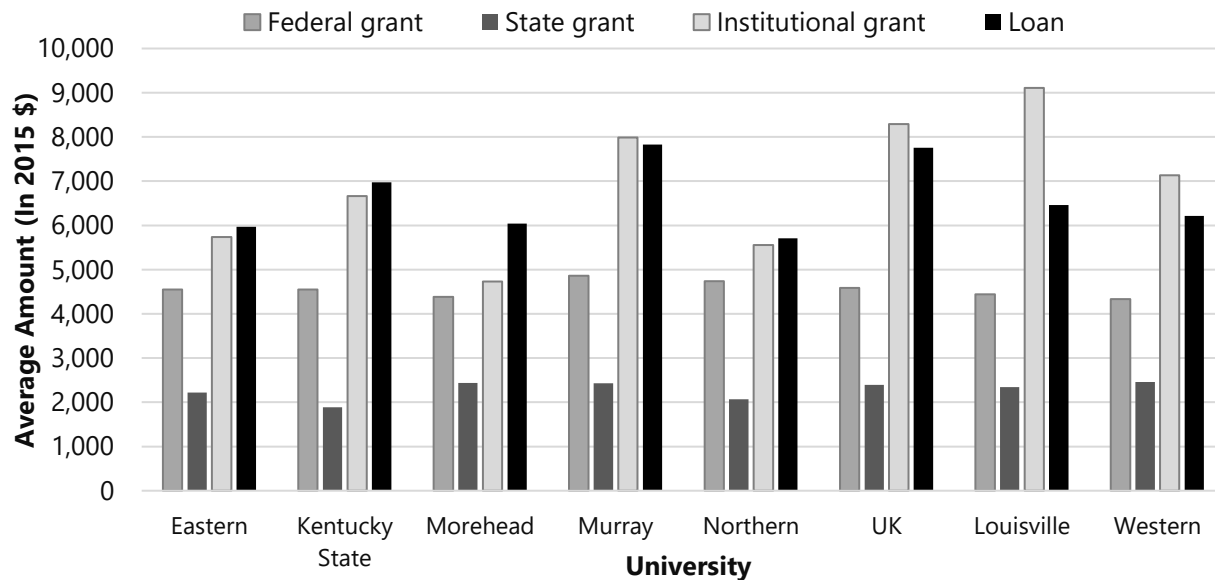


Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

In AY 2015, institutional grant aid was the largest average amount of financial aid award at four universities in Kentucky. Loans were the highest average amounts of aid awarded at the other four universities.

The average amounts of federal, state, and institutional grant aid and loans vary by university. Figure 5.D shows the average amount of all federal, state, and institutional grants and loans awarded to students for each university in Kentucky in AY 2015. Average federal grant awards ranged from \$4,333 (Western) to \$4,864 (Murray). Average state grant awards ranged from \$1,886 (Kentucky State) to \$2,456 (Western). Average institutional grant awards were the highest average awards to students in 2015 at four universities (Murray, UK, Louisville, and Western) and ranged from \$4,730 (Morehead) to \$9,111 (Louisville). Average loan awards were the highest awards to students at the other four universities (Eastern, Kentucky State, Morehead, and Northern) in 2015 and ranged from \$5,711 (Northern) to \$7,830 (Murray).

Figure 5.D
Average Financial Aid Amount Awarded To Students
By Type At Universities In Kentucky (In 2015 Dollars)
Academic Year 2015

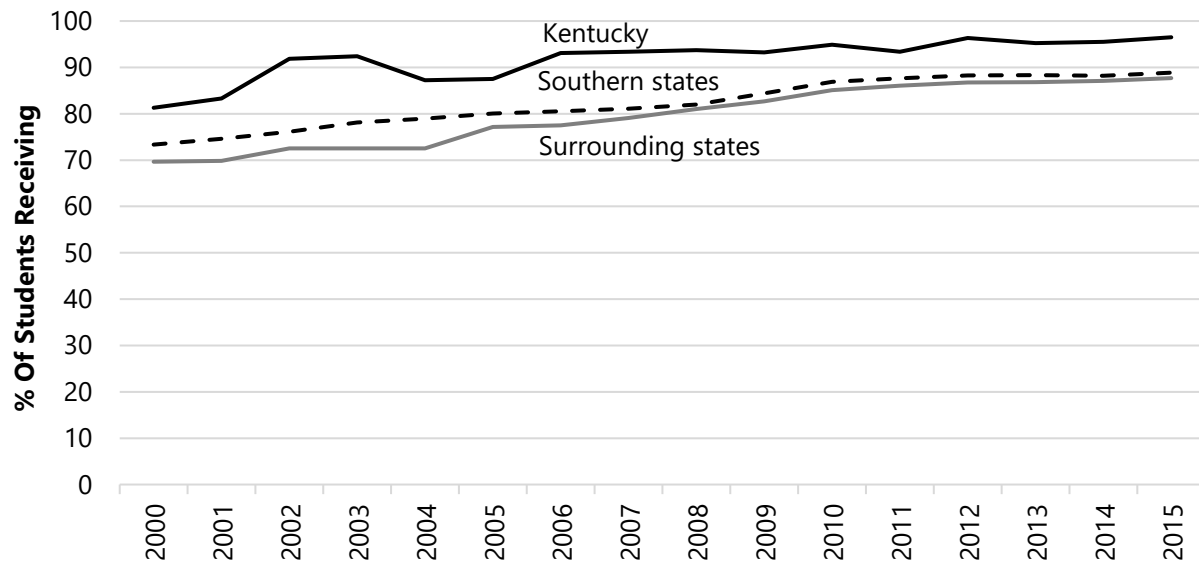


Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

A larger percentage of students at universities in Kentucky receive financial aid than students at universities in surrounding states and Southern states.

Figure 5.E shows the total percentage of students receiving any type of financial aid at universities in Kentucky, surrounding states, and Southern states from AY 2000 to AY 2015. Universities in Kentucky had the largest share of students with financial aid, but the percentage of students receiving any financial aid has increased for all three groups. In 2015, approximately 97 percent of students received some type of financial aid in Kentucky, compared to less than 90 percent of students in surrounding and Southern states.

Figure 5.E
Average Percentage Of Students Receiving Any Type Of Financial Aid At Universities
In Kentucky, Surrounding States, And Southern States
Academic Years 2000 To 2015



Note: Southern includes 245 universities, and Surrounding includes 84 universities. Kentucky State University data are missing in academic years 2000 and 2001.

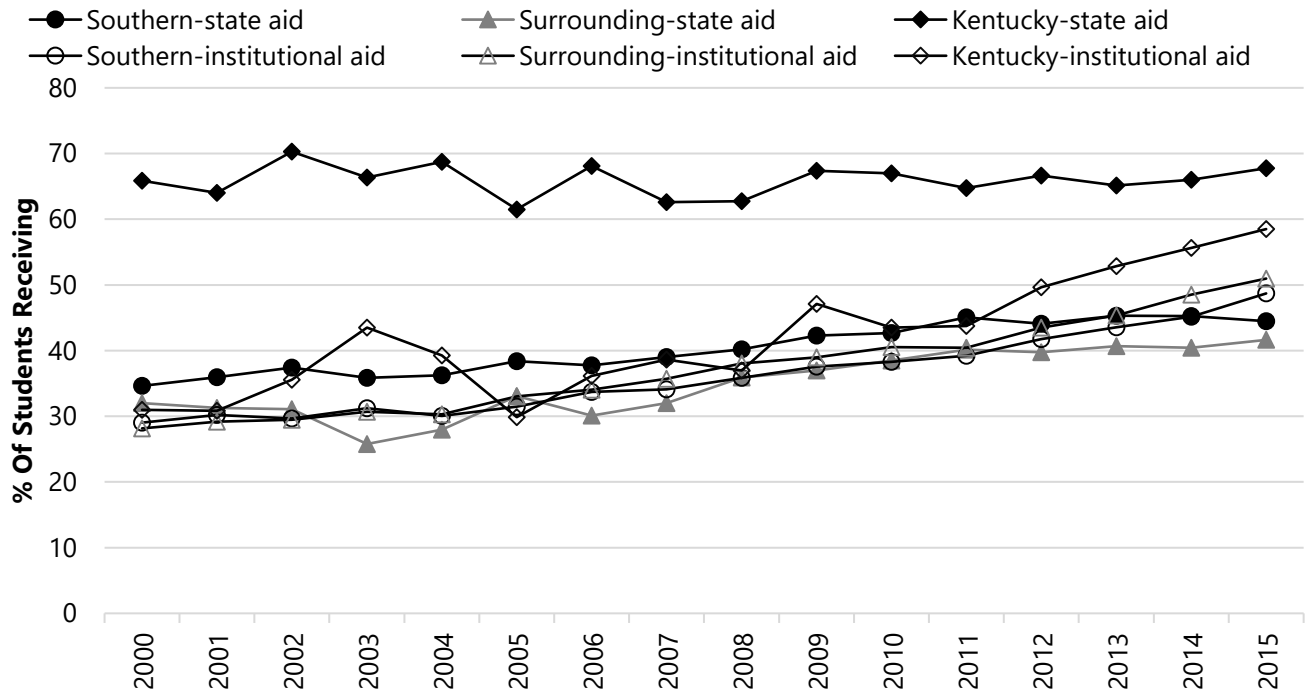
Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

State And Institutional Grant Aid

From 60 to 70 percent of students at universities in Kentucky received state grant aid from AY 2000 to AY 2015, which was consistently higher than in Southern and surrounding states. A larger percentage of students at universities in Kentucky received institutional grant aid since AY 2012 compared to Southern and surrounding states. In AY 2015, 58.5 percent of students at Kentucky universities received institutional grant aid.

A larger percentage of students attending Kentucky institutions are currently awarded state and institutional financial grant aid than students attending universities in surrounding and Southern states. Figure 5.F shows the average percentage of students receiving state or institutional grant aid from AY 2000 to AY 2015. Over this period, Kentucky provided state grant aid to 60 to 70 percent of students. Both Southern and surrounding states provided less than 50 percent of students with state grant aid during any given year. Institutional grant aid varied over time. Kentucky institutional grant aid increased, on average, with larger increases after 2001 and 2008 (overlapping two economic recessions). Kentucky universities awarded 31 percent of students with institutional grant aid in 2000 compared to 58.8 percent in 2015. In that year, universities in surrounding and Southern states awarded approximately one-half of students with institutional grant aid.

Figure 5.F
Average Percentage Of Students Receiving A State Or Institutional Grant At Universities In Kentucky, Surrounding States, And Southern States Academic Years 2000 To 2015



Note: Southern includes 245 universities, and surrounding includes 84 universities. Kentucky State University data are missing in academic years 2000 to 2003.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

Kentucky awards the largest percentage of students with state grant aid, but its average state grant aid awards are lower than Southern and surrounding states.

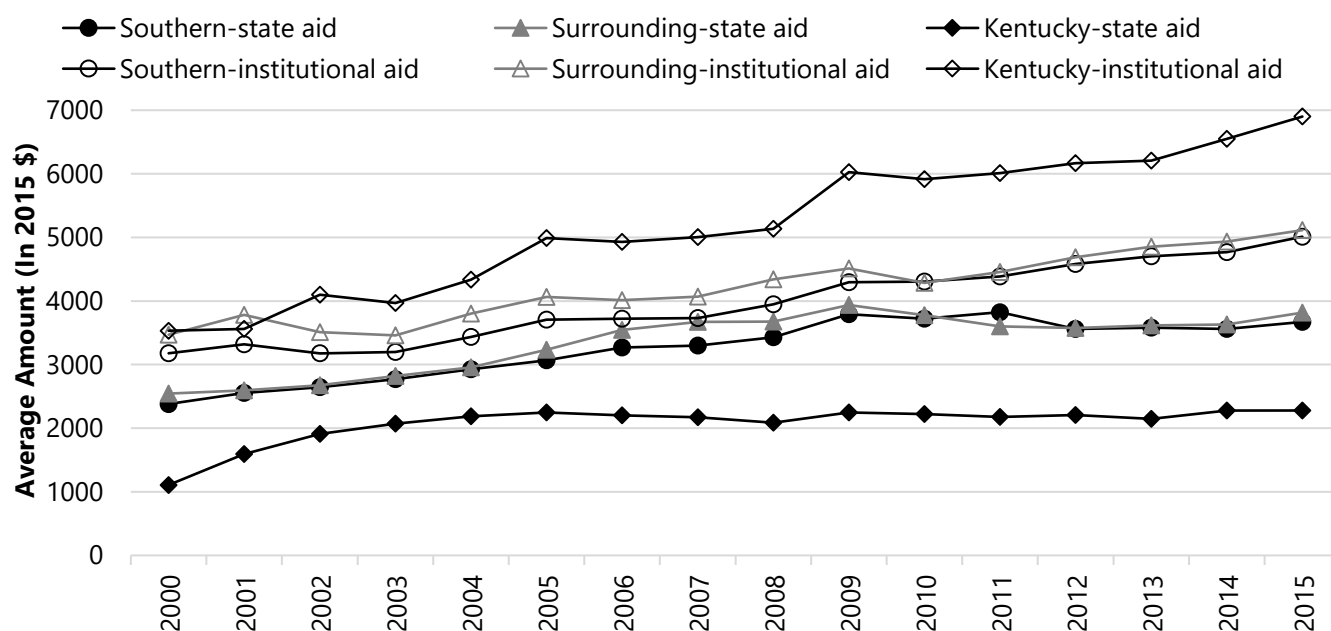
Figure 5.G shows the average amount of state and institutional grant aid awarded to students at universities in Kentucky, surrounding, and Southern states from AY 2000 to AY 2015. Kentucky has awarded a larger percentage of students with state grant aid, but the average amount of state grant aid has been lower than state grant aid awards at universities in surrounding and Southern states. After 2003, the average state grant award to students in Kentucky was stable, but average state awards in surrounding and Southern states increased over time. On average, increases in aid in Southern schools went to need-based students from 2005 to 2015, but seven Southern states, one surrounding state, and Kentucky decreased the proportion of total aid going to need-based students.^{15, c}

^c Average state awards decreased in Alabama, Arkansas, Delaware, Georgia, Kentucky, South Carolina, and Tennessee.

In Kentucky, institutional grant aid awards have been awarded to the largest percentage of students since AY 2012, and the average amount of institutional grant aid has been larger than average amounts at universities in surrounding and Southern states since AY 2002.

Institutional grants in Kentucky have been awarded to the largest percentage of students since 2012, and average award amounts for institutional grants at universities in Kentucky have been higher than those at universities in surrounding and Southern states since 2002. In 2000, universities in Kentucky awarded an average of \$3,533 in institutional grant aid, which was similar to surrounding and Southern states. In 2015, on average universities in Kentucky awarded \$6,900 in institutional grant aid, which was almost \$1,800 more than the average in Southern and neighboring states.

Figure 5.G
Average Amount Of State and Institutional Grants Awarded To Students At Universities In Kentucky, Surrounding States, And Southern States (In 2015 Dollars)
Academic Years 2000 To 2015



Note: Southern includes 245 universities, and surrounding includes 84 universities. Kentucky State University data are missing in academic years 2000 to 2003.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

After AY 2004, Kentucky was second highest in providing the largest percentage of students with state grant aid among surrounding states.

Kentucky has provided a larger percentage of students with state grant aid, on average, than individual surrounding states except Tennessee since AY 2004. Table 5.3 is the average percentage of students receiving grant aid during AY 2000 and AY 2015. In 2000, Kentucky awarded the highest percentage of students with state grant aid; Tennessee awarded the lowest percentage of students with state grant aid. In 2004, Tennessee awarded the largest percentage of students state grant aid. As of 2015, Tennessee continued to provide the highest percentage of students

with state grant aid at 77.1 percent; Ohio awarded the lowest percentage of students state grant aid at 24.9 percent. The percentage of students receiving state grant aid in Ohio decreased from 2000 to 2015 by 27.7 percentage points. All other states increased aid over this period. Tennessee state grant aid had the largest increase of 64.5 percentage points.

Table 5.3
Average Percentage Of Students Receiving State Grant Aid
At Universities In Kentucky And Surrounding States
Academic Years 2000 And 2015

State	2000	2015	% Point Change
Illinois	42.9%	43.5%	0.6%
Indiana	31.6	33.9	2.3
Kentucky	65.9	67.8	1.9
Missouri	25.5	42.5	17.0
Ohio	52.6	24.9	-27.7
Tennessee	12.6	77.1	64.5
Virginia	30.0	34.0	4.0
West Virginia	25.1	51.4	26.3

Note: Kentucky State University data are missing in academic year 2000. Surrounding states include a total of 84 universities.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

Among surrounding states, Kentucky ranked third lowest in average amount of state grant aid awarded in AY 2015.

Table 5.4 shows the average amount of state grant aid awarded to students at universities in Kentucky and surrounding states in AY 2000 and AY 2015. In 2000, Kentucky awarded the lowest average amount of state grant awards to students. In 2015, Kentucky offered the third lowest average award amount. The average amount of state grant aid awarded increased by 105.7 percent during this period, among the largest state increases.^d

^d Kentucky state grant aid increased the most from AY 2000 to AY 2004, which could be affected by missing data. Values for Kentucky State University are missing for AY 2000 to AY 2003.

Table 5.4
Average Amount Of State Aid Grant Awarded To Students At Universities
In Kentucky and Surrounding States (In 2015 Dollars)
Academic Years 2000 And 2015

State	2000	2015	% Change
Illinois	\$3,801	\$4,204	10.6%
Indiana	2,756	5,521	100.3
Kentucky	1,107	2,278	105.7
Missouri	2,332	1,758	-24.6
Ohio	1,120	1,131	1.0
Tennessee	2,025	4,812	137.6
Virginia	3,394	5,471	61.2
West Virginia	2,127	3,811	79.2

Note: Kentucky State University data are missing in academic years 2000 to 2003. Surrounding states includes a total of 84 universities.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

In AY 2015, Kentucky ranked fourth highest in terms of the largest percentage of students with institutional grant aid when compared to individual surrounding states.

Table 5.5 shows the average percentage of students receiving an institutional grant in Kentucky and surrounding states in AY 2000 and AY 2015. In 2000, universities in Kentucky awarded an average of 31 percent of students with institutional grant aid. The percentage in other states ranged from 57.3 percent (Missouri) to 17 percent (Illinois). The average percentage of students receiving institutional grant aid increased by 27.5 percentage points in Kentucky from 2000 to 2015. In 2015, universities in Kentucky awarded institutional grant aid to 58.5 percent of students. The range among states was 67.5 percent (Missouri) to 35.4 percent (Indiana).

Table 5.5
Average Percentage Of Students Receiving Institutional Grant Aid
At Universities In Kentucky And Surrounding States
Academic Years 2000 And 2015

State	2000	2015	% Point Change
Illinois	17.0%	61.9%	44.9%
Indiana	19.1	35.4	16.3
Kentucky	31.0	58.5	27.5
Missouri	57.3	67.5	10.2
Ohio	33.0	63.4	30.4
Tennessee	25.6	37.7	12.1
Virginia	18.5	40.6	22.1
West Virginia	24.8	50.6	25.8

Note: Kentucky State University data are missing in academic years 2000 to 2003. Surrounding states includes a total of 84 universities.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

Universities in Kentucky award the largest average amounts of institutional grant aid compared to surrounding states. On average, the largest increases in institutional grant aid awards from AY 2001 to AY 2015 were in Kentucky.

Table 5.6 is the average amount of institutional grant aid awarded to students at universities in Kentucky and surrounding states in AY 2000 and AY 2015. In 2000, universities in Kentucky awarded the fourth highest average institutional grant aid, \$3,533. In 2015, universities in Kentucky awarded the highest average institutional grant, \$6,900. Over the period, the average amount of institutional increased by 95.3 percent.

Table 5.6
Average Institutional Grant Aid Awarded To Students At
Universities In Kentucky And Surrounding States (In 2015 Dollars)
Academic Years 2000 And 2015

State	2000	2015	% Increase
Illinois	\$2,937	\$5,279	79.7%
Indiana	2,437	3,990	63.7
Kentucky	3,533	6,900	95.3
Missouri	3,438	5,043	46.7
Ohio	3,877	5,409	39.5
Tennessee	4,064	5,190	27.7
Virginia	5,056	6,680	32.1
West Virginia	1,919	3,650	90.2

Note: Kentucky State University data are missing in academic years 2000 to 2003. Surrounding states includes a total of 84 universities.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

In AY 2015, the percentage of students receiving a state grant award ranged from 42 percent (Kentucky State) to 80 percent or more (Eastern, Morehead, and Louisville).

Kentucky universities vary in the percentage of students who receive state grant awards and the amount received. Table 5.7 shows the percentage of students receiving a state grant aid at universities in Kentucky in AY 2000 and AY 2015. In 2015, the percentage of students receiving a state grant award by university ranged from 42 percent (Kentucky State) to 80 percent or more (Eastern, Morehead, and Louisville). Eastern experienced a 38 percentage point increase in percentage of students receiving state grant aid from 2000 to 2015, the largest increase during that period, but it had the lowest share of students receiving state grant aid in 2000, 46 percent.

Table 5.7
Percentage Of Students Receiving State Grant Aid At Universities In Kentucky
Academic Years 2000 And 2015

University	2000	2015	% Point Change
Eastern	46%	84%	38%
Kentucky State	-	42	-
Morehead	77	82	5
Murray	61	60	-1
Northern	63	62	-1
UK	68	59	-9
Louisville	71	80	9
Western	75	73	-2

Note: Kentucky State University data are missing in academic year 2000.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

The average amount of state grant aid was similar for six of the eight Kentucky universities, varying by less than \$300 in AY 2015.

Table 5.8 shows the average amount of state grant aid awarded to students for universities in Kentucky for AY 2000 and AY 2015. The average amount of state grant aid awarded was similar for six of eight universities. Average aid at the six schools varied by approximately \$300 or less, ranging from \$2,217 (Eastern) to \$2,456 (Western). In 2015, the lowest average amounts of state grant aid were \$1,886 (Kentucky State) and \$2,066 (Northern). Eastern had the largest increase in the average amount of state grant aid awarded to students. On average, Eastern students received \$798 in state grant aid in 2000, which was the lowest of all universities during that year. The average amount increased to \$2,217 by 2015.

Table 5.8
Average Amount Of State Grant Money Awarded To
Students At Universities In Kentucky (In 2015 Dollars)
Academic Years 2000 And 2015

University	2000	2015	% Change
Eastern	\$798	\$2,217	177.7%
Kentucky State		1,886	
Morehead	1,105	2,437	120.5
Murray	1,237	2,427	96.1
Northern	1,104	2,066	87.2
UK	1,034	2,395	131.7
Louisville	957	2,342	144.8
Western	1,517	2,456	61.9

Note: Kentucky State University data are missing in academic year 2000.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

The percentage of students receiving institutional grant aid increased at all Kentucky universities from AY 2000 to AY 2015.

Table 5.9 is the percentage of students receiving institutional grant aid at universities in Kentucky in AY 2000 and AY 2015. The percentage of students receiving institutional grant aid increased at all universities. Eastern also had the largest increase in the percentage of students receiving institutional grant aid. In 2000, only 7 percent of students at Eastern received institutional grant aid. By 2015, 41 percent of students received institutional grant aid at Eastern. The percentage of students receiving institutional grant aid ranged from 41 percent (Eastern) and 43 percent (Western) to 65 percent or more at four schools (Kentucky State, Morehead, Murray, and UK).

Table 5.9
Percentage Of Students Receiving Institutional Grant Aid At Universities In Kentucky
Academic Years 2000 And 2015

University	2000	2015	% Point Increase
Eastern	7%	41%	34%
Kentucky State	-	65	
Morehead	44	68	24
Murray	53	72	19
Northern	20	57	37
UK	25	67	42
Louisville	40	55	15
Western	28	43	15

Note: Kentucky State University data are missing in academic year 2000.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

On average, the average amount of institutional grant aid increased at all universities in Kentucky from AY 2000 to AY 2015.

Table 5.10 shows the average amount of institutional grant aid awarded to students at universities in Kentucky in AY 2000 and AY 2015. The average amount of institutional grant aid awarded increased for all universities. The average amount of institutional grant aid awarded to students increased the most at Eastern at 406.1 percent, and UK had the smallest increase during this period at 51.7 percent. In 2015, average institutional awards varied significantly, the highest average of more than \$9,000 (Louisville) was nearly twice as much as the lowest (Morehead, \$4,730).

Table 5.10
Average Amount Of Institutional Grant Aid Awarded To Students
At Universities In Kentucky (In 2015 Dollars)
Academic Years 2000 And 2015

University	2000	2015	% Change
Eastern	\$1,133	\$5,733	406.1%
Kentucky State	-	6,664	-
Morehead	2,486	4,730	90.3
Murray	3,990	7,984	100.1
Northern	3,064	5,555	81.3
UK	5,466	8,290	51.7
Louisville	5,084	9,111	79.2
Western	3,506	7,136	103.6

Note: Kentucky State University data are missing in academic year 2003.

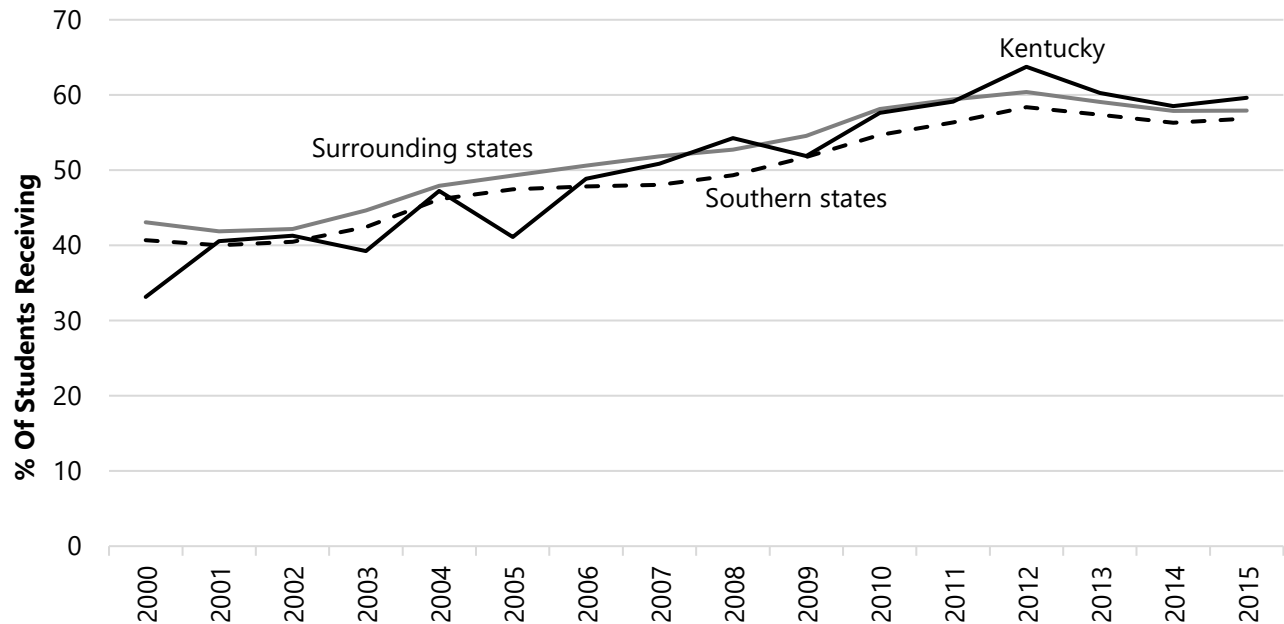
Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

Student Loans

Universities in Kentucky, surrounding, and Southern states have similar percentages of students receiving student loans. Values for all three have increased over time, on average, but have remained relatively flat or decreased since AY 2012.

On average, both the percentage of students receiving loans and the average amount of loans awarded to students at universities in Kentucky are similar to the percentages and amounts at universities in surrounding and Southern states. Figure 5.H is the average percentage of students receiving a loan award at universities in Kentucky, surrounding, and Southern states from AY 2000 to AY 2015. The percentage of students awarded a loan increased over this period, on average, but remained relatively flat or decreased since 2012. For Kentucky, the percentage of students receiving loans increased from approximately 47 percent to almost 60 percent from 2004 to 2015. Southern and surrounding states had similar increases.

Figure 5.H
Average Percentage Of Students Receiving A Student Loan At
Universities In Kentucky, Surrounding States, And Southern States
Academic Years 2000 To 2015



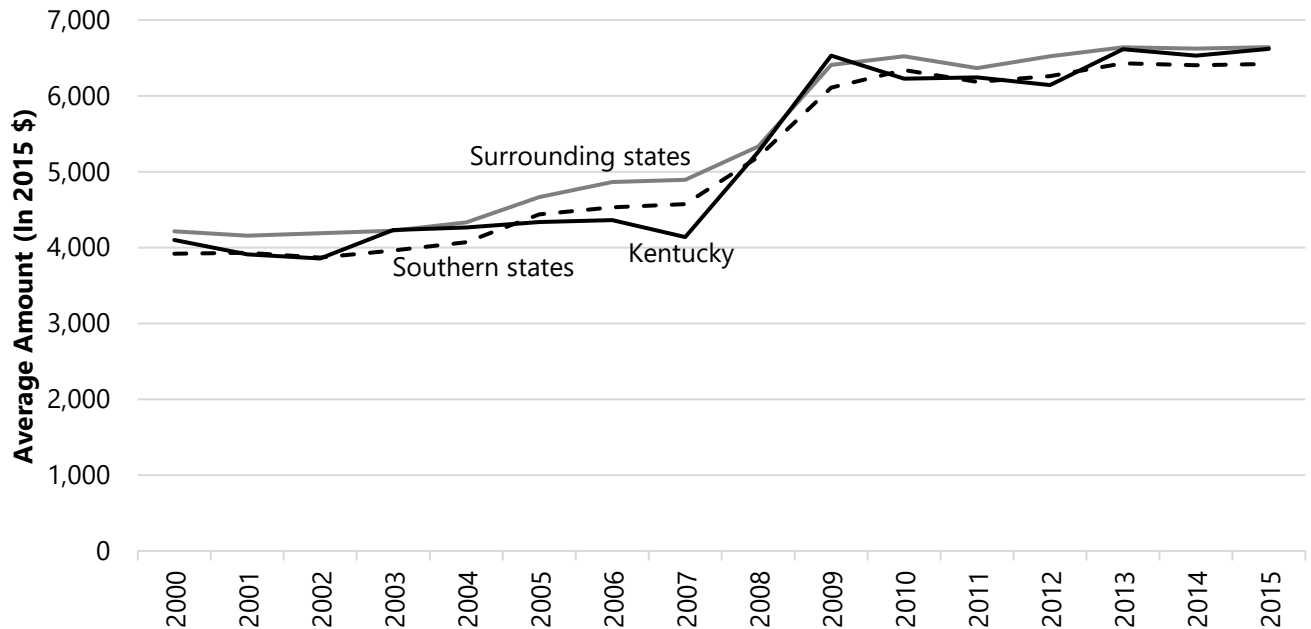
Note: Kentucky State University data are missing in academic years 2000 to 2003.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

The largest increases in average student loan awards occurred between AY 2007 and AY 2009, which occurred during the latest economic recession.

Figure 5.I shows that the average amount of student loan awarded to students increased at universities in Kentucky, surrounding, and Southern states from AY 2000 to AY 2015. The largest increase in the amount of student loans awarded occurred between 2007 and 2009, which occurred at the same time as the latest economic recession. Since 2009, the average amount of loan awards have remained relatively flat for Kentucky, surrounding, and Southern states, ranging from \$6,100 to \$6,600.

Figure 5.I
Average Amount Of Student Loans Awarded At Universities In
Kentucky, Surrounding States, And Southern States (In 2015 Dollars)
Academic Years 2000 To 2015



Note: Kentucky State data are missing in academic years 2000 to 2003.

Source: The Integrated Postsecondary Education Data System, Student Financial Aid Survey.

¹ “Paying for College.” Kentucky Higher Education Assistance Authority. 2018. Web. Oct. 15, 2018.

² S. Dynarski and J. Scott-Clayton. “Financial aid policy: Lessons from Research” (No. w18710). National Bureau of Economic Research. (2013).

³ Matthew B. Fuller “A History of Financial Aid to Students,” *Journal of Student Financial Aid* 44.1 (2014): 42-68. Web. Aug. 8, 2017.

⁴ “About Us.” Kentucky Higher Education Student Loan Corporation. Retrieved (n.d.) Web. Aug. 8, 2017; “About Us.” Kentucky Higher Education Assistance Authority. (2017). Web. Aug. 8, 2017.

⁵ Kentucky Higher Education Assistance Authority. “2016 KHEAA Annual Audited Financial Statements.” (2016). Web. Sept. 4, 2017.

⁶ Kentucky Higher Education Authority “2016 Annual report.” 2017. Web. Sept. 4, 2017.

⁷ Kentucky Higher Education Assistance Authority. “State Government” (2017). Web. Aug. 9, 2017.

⁸ Kentucky Higher Education Assistance Authority. “Affording Higher Education.” (2016). Web. Aug. 15, 2017.

⁹ The College Board. “Trends in Student Aid 2016”. Trends in Higher Education Series. (2016). Web. Aug. 10, 2017.

¹⁰ Dustin Weeden. “Higher Education Appropriations.” National Conference of State Legislatures. (2015). Web. Aug. 21, 2017.

¹¹ Brittany Hackett. "State Higher Ed Funding Down Billions Since Great Recession." National Association of Student Financial Aid Administrators. (2017). Web. Aug. 16, 2017.

¹² National Association of State Student Grant & Aid Programs. "46th Annual Survey Report on State-Sponsored Student Financial Aid: 2014-2015 Academic Year" (2015). Web. Aug. 8, 2017.

¹³ Michael Mitchell, Michael Leachman, and Kathleen Masterson. "A Lost Decade in Higher Education Funding State Cuts Have Driven Up Tuition and Reduced Quality Center on Budget and Policy Priorities." (2017). Web. Aug. 11, 2017.

¹⁴ United States. Integrated Postsecondary Education System (IPEDS) Student Financial Aid and Net Price Survey. Web. June 2017.

¹⁵ National Association of State Student Grant & Aid Programs "46th Annual Survey Report on State-Sponsored Student Financial Aid." (2015). Web. Aug. 15, 2017.

Chapter 6

Student Loan Debt And Default

The first section of this chapter discusses the types of federal and Kentucky state loans available to students to help finance the costs of postsecondary education. The second section discusses national trends in student loan debt. The third section discusses trends in student loan debt in Kentucky. This section shows trends in the average median debt of students from Kentucky's universities and compared to surrounding and Southern states. Trends in debt are also shown for individual universities by completion status and family income.

The fourth section discusses two measures of student loan default: 2-year and 3-year cohort default rates. Trends in the 2-year rate are shown from FY 2001 to FY 2013. The 3-year rate, implemented in FY 2012, is currently used by the US Department of Education. Trends in both rates are shown for Kentucky's universities compared to surrounding and Southern states. Trends are also shown for individual Kentucky universities.

The fifth section discusses student loan repayment rates, another measure of student loan repayment. The 3-year rate, implemented in FY 2010, is the current measure used by the US Department of Education. Trends in the 3-year rate are shown for Kentucky's universities compared to surrounding and Southern states. Rates for individual Kentucky universities are shown.

Student Loans

The federal government, Kentucky and private entities offer loan programs to assist students with financing the cost of postsecondary education.

The federal government, Kentucky, and private entities offer loan programs to students to assist with financing the cost of postsecondary education.¹ Table 6.1 shows current programs available for undergraduate students from the federal government and Kentucky. Typically, students first apply for federal loans and then pursue other loan programs if needed. The two federal loan programs for undergraduates are the Federal Direct Loan and the Federal Perkins Loan.² Both programs require students to fill out the Free Application for Federal Student Aid but have

different criteria for determining how much students will be awarded. The Kentucky Higher Education Student Loan Corporation offers the Advantage Education Loan. It is the only state-based, private loan.

Table 6.1
Student Loan Programs

	Program	Description
Federal	Direct	Unsubsidized loan awarded to full-time undergraduate students. The amount depends on year in school and dependency status. The Free Application for Federal Student Aid is required.
	Perkins	Awarded of up to \$5,500 per year to part-time or full-time undergraduate students with exceptional financial need. The Free Application for Federal Student Aid was required. The program ended on September 30, 2017, and final disbursements were made through June 30, 2018.
Kentucky	Advantage Education	Available to all students. Applicants must show proof of income and credit history or have an approved cosigner.

Source: Kentucky Higher Education Assistance Authority.

Student Loan Debt

Student loan debt is the total loan balance accumulated. Nationally, student loan debt has increased more rapidly than increases in tuition.

Student loan debt, the total amount of loans accumulated, is affected by costs of postsecondary education and typically is not repaid until a student graduates or withdraws from school. Students have been found to increase borrowing in response to increasing tuition prices.³ However, student debt has increased more rapidly than increases in tuition, and an increasing percentage of loans were used to cover tuition over academic years 1991 to 2012.⁴ Students' lack of information or financial literacy may also affect the amount of debt incurred.⁵

Nationally, student loan debt increased by 70 percent from 2004 to 2012.

Nationally, the amount of student debt and the number of students borrowing increased by 70 percent from 2004 to 2012.⁶ According to a report by College Scorecard, student loan debt increased for bachelor's degree recipients at 4-year, public universities by 13 percent from AY 2010 to AY 2015. This was more than the increases during the two previous 5-year periods.⁷ In AY 2015, undergraduate borrowers who graduated had an average debt of \$26,800.^a

^a The amounts include only debt accumulated while at the university from which the student graduated.

Some researchers argue that borrowing is not necessarily too high. They claim that focusing on the few cases of student loan balances over \$100,000 gives a distorted understanding of debt.⁸ Instead, researchers argue that a student's potential for earnings after college should determine whether student loan debt is too high.⁹ Some researchers have concerns the workforce's skillset remains constant while student loan debt increases and that student loan debt contributes to the decline in homeownership rates among adults ages 28 to 35.¹⁰

Kentucky's graduates have lower debt than graduates in the majority of all other states. Kentucky students' average debt service-to-income ratio of 11.7 percent is below most maximum recommendations of 12 to 20 percent.

Student Loan Debt In Kentucky. In AY 2014, an average of 32.5 percent of a student's family income was needed to attend UK or Louisville.¹¹ On average, 24.4 percent of family income was required to attend one of the six regional comprehensive universities. Students financed some of the costs with student loan debt. Kentucky's public institutions rank 32nd in the nation for students graduating with the highest levels of student loan debt, meaning that Kentucky's graduates have less debt after graduating than the majority of states.¹² Three years after graduation, students have an average debt service-to-income ratio of 11.7 percent, but the ratio varies by major.¹³ Science, technology, engineering and math (STEM) majors report an average debt service-to-income ratio of 7 percent. Ratios among social and behavioral sciences and arts and humanities majors range from 14.9 percent to 16.8 percent.¹⁴ Researchers recommend devoting approximately 10 percent of pre-tax earnings to student loan repayment and suggest that the payment-to-income percentage should be less than 18 percent to 20 percent.¹⁵ Woo and Soldner (2013) recommend that the payment-to-income share remain under 12 percent.¹⁶

Staff received College Scorecard data from CPE.¹⁷ College Scorecard is published by the US Department of Education and provides data from the department's National Student Loan Data System and Office of Federal Student Aid. The data, which are reported by fiscal year, begin in FY 2001. Debt and repayment measures are based on data from all undergraduates, not just first-time, full-time undergraduates. Measures by completion rate are exceptions as completion rates are calculated using data on first-time, full-time undergraduates. Staff adjusted all dollar figures to 2015 dollars.

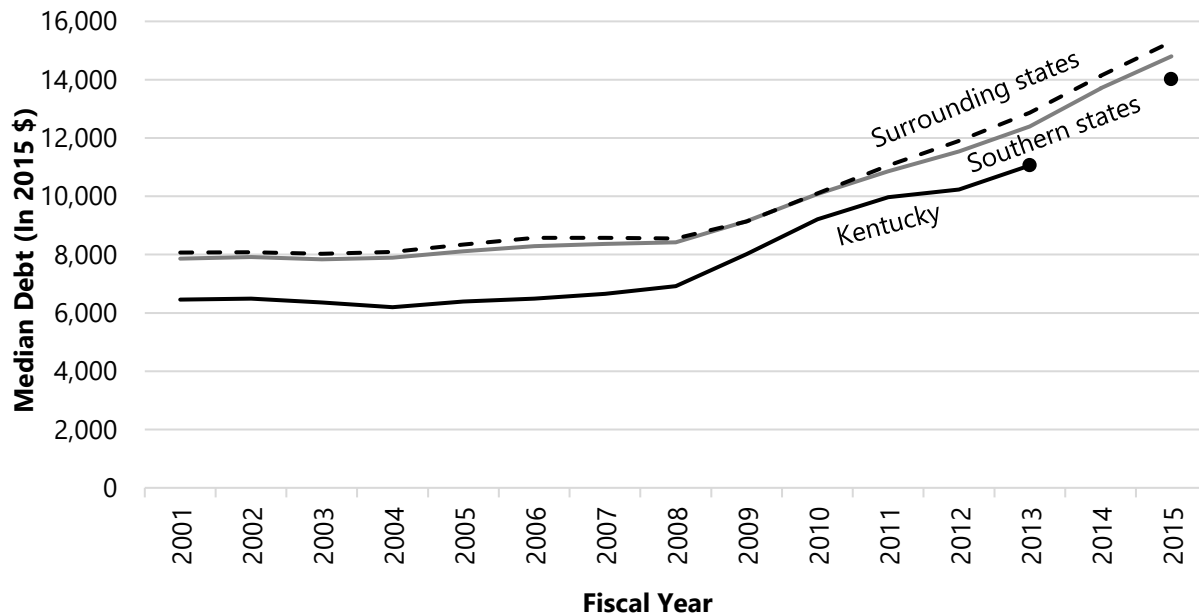
Kentucky's students had lower median student loan debt than students from universities in surrounding and Southern states in all years from FY 2001 to FY 2015. In FY 2015, the median debt for Kentucky's students was \$14,012. Median debt increased for all three groups after FY 2008.

As defined by the US Department of Education, median debt is calculated from the sum of all undergraduate federal loans held by students, measured at the time a student enters repayment.^c Debt data are collected by the National Student Loan Data System and include student loan debt held only at the reporting university. Figure 6.A shows the average median debt of students from universities in Kentucky, surrounding, and Southern states from FY 2001 to FY 2015.^d Median debt was relatively flat from FY 2001 to FY 2008 for all groups and then increased starting in FY 2008. Students from universities in Kentucky had lower median loan debt than students from universities in surrounding and Southern states in all years. In FY 2001, students from universities in Kentucky had an average median debt of approximately \$6,453, and by FY 2008, average median debt increased by approximately 7 percent to \$6,918. After FY 2008, the median average debt of students increased by approximately 103 percent to \$14,012 in FY 2015.

^c Repayment occurs when a student graduates or withdraws from the university.

^d Average median debt refers to the average value of median debt held at each university within each group.

Figure 6.A
Average Median Debt Of Students From Universities In Kentucky,
Surrounding States, And Southern States (In 2015 Dollars)
FY 2001 To FY 2015



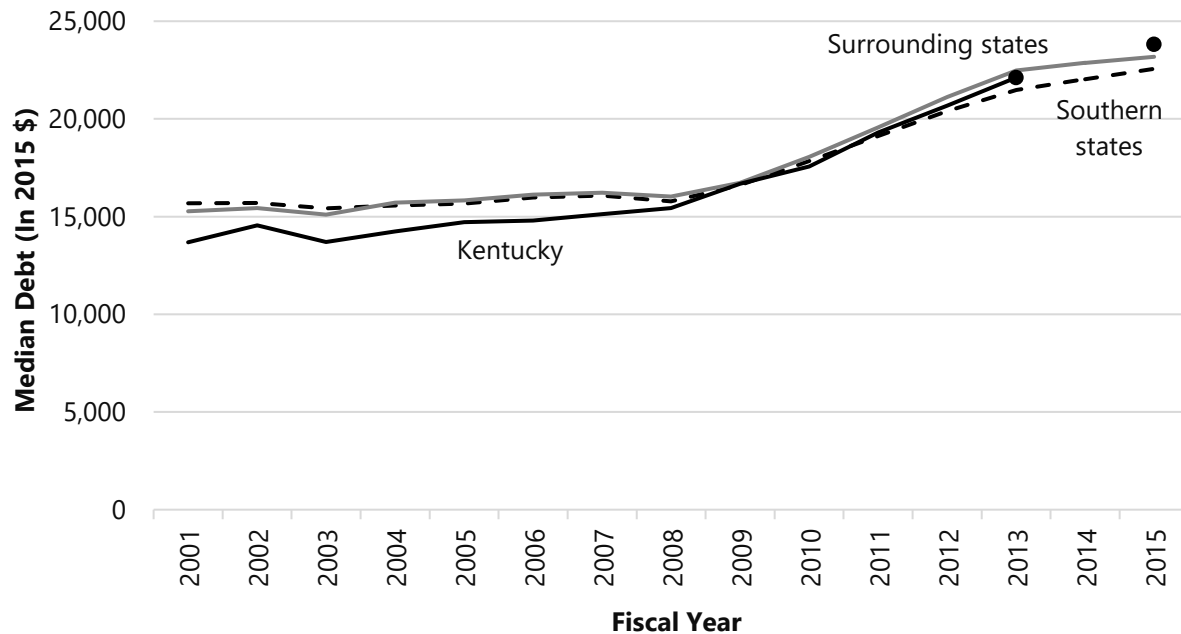
Note: Kentucky’s universities did not report data for FY 2014. Surrounding includes 83 universities; Southern includes 246 universities.

Source: United States. Dept. of Education. National Student Loan Data System for Students.

College graduates in Southern, surrounding, and Kentucky universities have similar amounts of student loan debt. Debt increased for all three groups after FY 2008. The average median debt for a college graduate in Kentucky was \$23,822 in FY 2015.

Graduates of universities in Kentucky, surrounding, and Southern states have similar average median debt levels. Figure 6.B is the median debt for students who graduated from universities in these three groups from FY 2001 to FY 2015. Students who entered repayment and withdrew without completing school are not included. Differences between students from universities in Kentucky, surrounding, and Southern states are less than approximately \$2,000 in each year. In FY 2001, graduates of universities in Kentucky had the lowest average median debt at \$13,686, and graduates of universities in Southern states had the highest at \$15,688. In FY 2015, graduates of universities in Southern states had the lowest at \$22,564, and graduates of universities in Kentucky had the highest at \$23,822. Furthermore, the trend is similar to overall debt levels in Figure 6.A. Median debt of college graduates remained relatively flat until FY 2008 and then increased. The average debt for graduates of universities in Kentucky increased 13 percent from FY 2001 to FY 2008 and by 50 percent from FY 2008 to FY 2015.

Figure 6.B
Average Median Debt Of College Graduates From Universities
In Kentucky, Surrounding States, And Southern States (In 2015 Dollars)
FY 2001 To FY 2015



Note: Kentucky's universities did not report data for FY 2014. Surrounding includes 83 universities. Southern universities have several missing values for median debt by college graduate; the number of universities range from 214 to 246 per year.

Source: United States. Dept. of Education. National Student Loan Data System for Students.

In FY 2015, students at Kentucky's universities had the fourth lowest median debt compared to surrounding states. However, the average median debt of Kentucky's students increased by 117 percent since FY 2001, which was the second largest increase.

Table 6.2 lists the average median debt for students from universities in Kentucky and surrounding states for FY 2001 and FY 2015. In FY 2001, Kentucky's students had the third lowest average median debt level, which was approximately 5 percent higher than the lowest average (Indiana). By FY 2015, Kentucky's students had the fourth lowest, which was approximately 6 percent higher than the lowest average (West Virginia). However, the average median student debt of students from universities in Kentucky increased by 117 percent from FY 2001 to FY 2015, which was the second largest increase.

Table 6.2
Average Median Debt Of Students From Universities
In Kentucky And Surrounding States (In 2015 Dollars)
FY 2000 and FY 2015

State	FY 2001	FY 2015	% Increase
Illinois	\$8,716	\$16,078	84%
Indiana	6,128	14,475	136
Kentucky	6,453	14,012	117
Missouri	7,743	13,911	80
Ohio	7,307	15,395	111
Tennessee	6,973	13,845	99
Virginia	11,046	18,120	64
West Virginia	6,247	13,179	111

Note: Surrounding includes 84 universities.

Source United States. Dept. of Education. National Student Loan Data System for Students.

Median student debt increased for all universities in Kentucky from FY 2001 to FY 2015.

The median debt of students from all universities in Kentucky has increased. Table 6.3 is the median debt of students from universities in Kentucky who entered repayment in FY 2001 compared to students who entered repayment in FY 2015. In FY 2001, values ranged from \$4,327 (Morehead) to \$9,736 (UK). In FY 2015, values ranged from \$12,571 (Louisville) to \$15,041 (Western). The average median debt of Morehead students increased by 226 percent during this period, which was the largest increase. UK had the smallest increase in student debt, but it was still 50 percent after adjusting for inflation.

Table 6.3
Median Debt Of Students From Universities In Kentucky (In 2015 Dollars)
FY 2000 And FY 2015

University	FY 2001	FY 2015	% Increase
Eastern	\$6,023	\$14,213	136%
Kentucky State	6,227	14,250	129
Morehead	4,327	14,102	226
Murray	7,361	13,107	78
Northern	5,652	14,250	152
UK	9,736	14,559	50
Louisville	7,026	12,571	79
Western	5,270	15,041	185

Source: United States. Dept. of Education. National Student Loan Data System for Students.

Student debt increased at a lower rate for graduates than for nongraduates combined from FY 2001 to FY 2015 for all universities in Kentucky except Louisville.

Table 6.4 looks at the median debt of college graduates at universities in Kentucky who graduated in FY 2001 compared to those who graduated in FY 2015. In all cases, median debt of college graduates is higher than the median debt of graduates and nongraduates combined (Table 6.3), because graduates typically stay in school longer. However, the percentage change in median debt from FY 2001 to FY 2015 was smaller for college graduates than for all students combined for all universities except Louisville.

Table 6.4
Median Debt Of Graduates From Universities In Kentucky (In 2015 Dollars)
FY 2001 And FY 2015

University	FY 2001	FY 2015	% Increase
Eastern	\$13,283	\$23,500	77%
Kentucky State	16,858	30,982	84
Morehead	12,012	25,000	108
Murray	-	20,908	-
Northern	16,595	24,184	46
UK	16,922	21,500	27
Louisville	10,728	20,493	91
Western	9,402	24,011	155

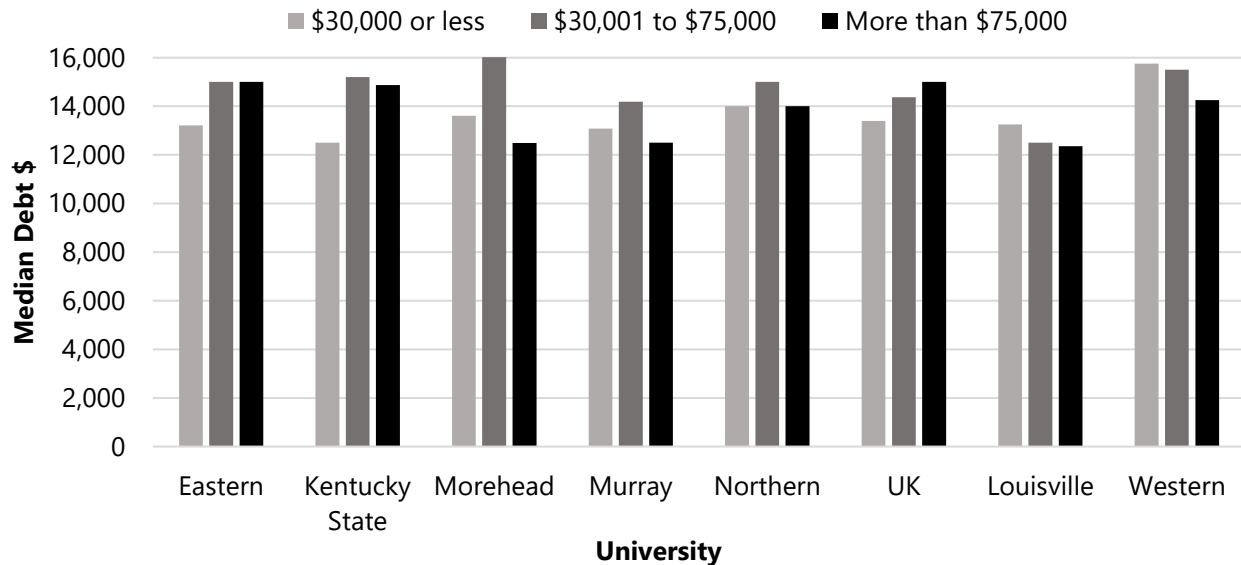
Note: Murray did not report data for FY 2001.

Source: United States. Dept. of Education. National Student Loan Data System for Students.

At half of Kentucky's universities, middle income students had the highest median student loan debt in FY 2015. There were no universities for which middle income students had the lowest median student loan debt.

Figure 6.C is the median debt of students by family income level at each university in Kentucky for FY 2015. Students with the highest family incomes had the lowest debt at four universities (Morehead, Murray, Louisville, and Western) and the highest debt at only one university (UK). Students in the middle income category had the highest debt at four universities (Kentucky State, Morehead, Murray, and Northern), but did not have the lowest debt at any university. Students with the lowest family incomes had the lowest debt at three universities (Eastern, Kentucky State, UK) and the highest debt at two universities (Louisville and Western). Overall, median debt ranged from \$12,000 to approximately \$16,000 for students from all family income groups.

Figure 6.C
Median Debt Of Students By Family Income Level From Universities In Kentucky
FY 2015



Source: United States. Dept. of Education. National Student Loan Data System for Students.

Student Loan Default Rates

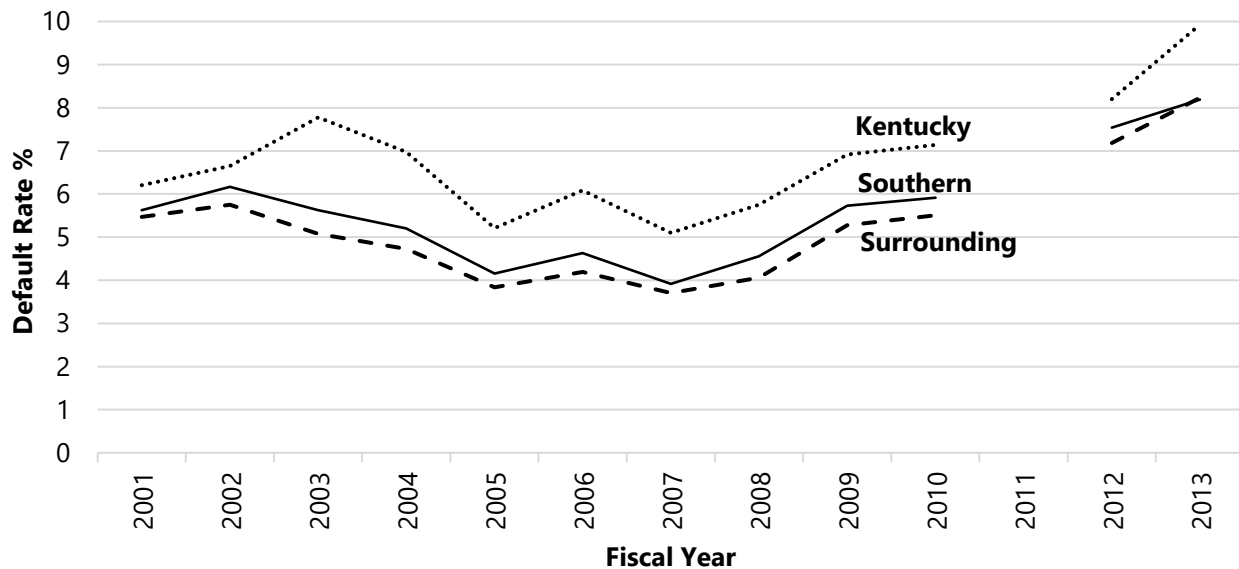
Default rates measure the percentage of students who do not make progress in repaying loans.

Default rates measure the percentage of students who do not make progress in repaying loans. Research on how the amount of student debt affects the likelihood of defaulting on a student loan is mixed. Some studies find that high levels of debt increase risk of default; others find that low levels of debt increase risk of default.¹⁸ Brown et al. (2015) finds that low levels of debt are just as risky as high levels of debt in regard to repayment delinquency, default rates, and increasing loan balances.¹⁹ Certain student characteristics are also related to the likelihood of defaulting on a student loan. For example, those less likely to default on a student loan include science, technology, engineering and math majors; students with higher family incomes; and students who graduated.²⁰ Nationally, default rates have been declining since FY 2010 for public institutions.²¹

The College Scorecard data from the US Department of Education includes default rates, which are collected by the Office of Federal Student Aid. The default rate is the percentage of students who have defaulted on student loans once entering repayment. The 2-year cohort default rate in a given year includes students who entered repayment

during that year and defaulted by the end of the following year.^e The 2-year cohort default measure was discontinued after FY 2013. Figure 6.D shows the changes in the average 2-year cohort default rates from FY 2001 to FY 2013. Kentucky's students had higher average rates than students in surrounding and Southern states in all years. Overall, rates for all groups fluctuated until FY 2007 and then increased from FY 2007 to FY 2013. By FY 2013, Kentucky's students had an average rate of 9.9 percent, which was higher than the average rate of 8.2 percent in surrounding and Southern states.

Figure 6.D
Average 2-Year Cohort Default Rates Of Students From Universities In Kentucky, Surrounding States, And Southern States FY 2001 To FY 2013



Note: No data were reported for FY 2011. Surrounding includes 83 universities; Southern includes 256 universities.

Source: United States. Dept. of Education. Office of Federal Student Aid.

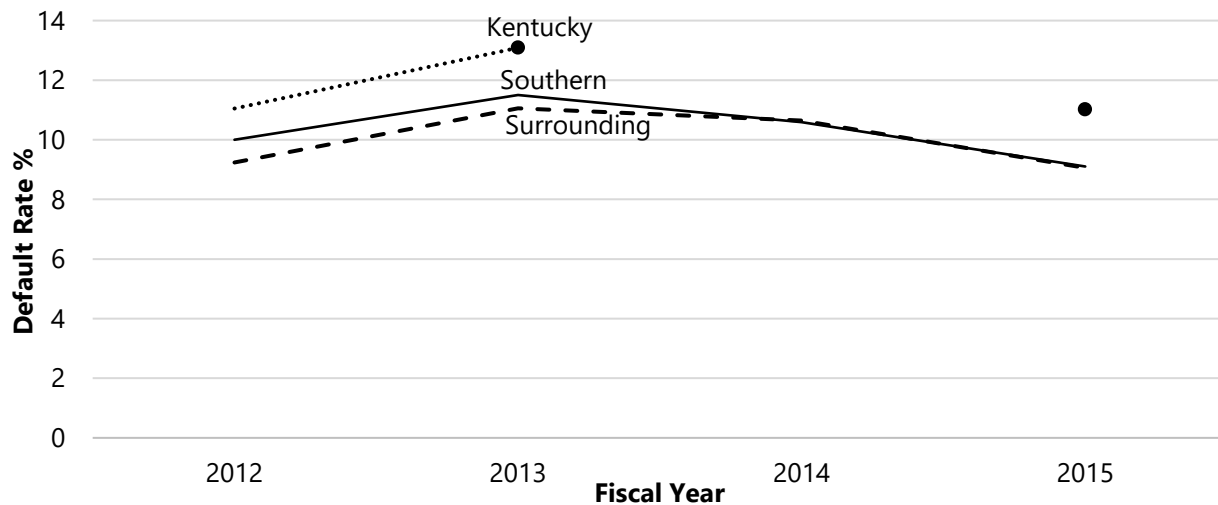
Although Kentucky had the highest 2-year cohort default rate when compared to the average value for surrounding states, it did not have the highest when compared to states individually. Kentucky's 2-year rate increased by 60.1 percent from FY 2001 to FY 2013. Increases in surrounding states ranged from 24.6 percent (Tennessee) to 83.1 percent (Indiana) over this time period.

^e For example, the 2-year cohort default rate for FY 2010 includes borrowers who entered repayment during FY 2010 and defaulted by the end of FY 2011.

Kentucky's 3-year cohort default rate of 11 percent in FY 2015 was higher than for Southern and surrounding state universities.

The 3-year cohort default rate, introduced in FY 2012, is the current measure used by the US Department of Education. The 3-year rate in a given year measures students who enter repayment in the current fiscal year and default in the current or following two fiscal years.^f Figure 6.E shows the average 3-year rates for students from universities in Kentucky, surrounding, and Southern states from FY 2012 to FY 2015. The rate increased from FY 2012 to FY 2013, but then decreased from FY 2013 to FY 2015. Kentucky's students had a higher average default rate than students from universities in surrounding and Southern states. In FY 2015, students in Kentucky had an average default rate of approximately 11 percent, which was higher than the average rate of 9.1 percent in surrounding and Southern states. However, Ohio (13.2 percent) and West Virginia (13.7 percent) had higher 3-year default rates than Kentucky in this year.

Figure 6.E
Average 3-Year Cohort Default Rates Of Students From Universities In Kentucky, Surrounding States, And Southern States FY 2012 To FY 2015



Note: Kentucky's universities did not report data for FY 2014. Surrounding includes 83 universities; Southern includes 256 universities.

Source: United States. Dept. of Education. Office of Federal Student Aid.

^f For example, the 3-year cohort default rate for FY 2013 includes students who entered repayment in FY 2013 and defaulted by the end of FY 2015.

Two-year default rates for all universities in Kentucky except Morehead increased significantly from FY 2001 to FY 2013.

Table 6.5 is the 2-year cohort default rate for students from universities in Kentucky for FY 2001 and FY 2013. Default rates increased for all schools except Morehead, which stayed the same. Murray had the largest increase in the rate at 4.3 percentage points, but had only the third highest rate in FY 2013 at 7.3 percent. Kentucky State's rate of 21.8 percent was more than twice as high as other schools.

Table 6.5
Two-Year Cohort Default Rate Of Students From Universities In Kentucky
FY 2001 And FY 2013

University	FY 2001	FY 2013	% Point Increase
Eastern	4.9%	9.1%	4.2%
Kentucky State	11.6	21.8	10.2
Morehead	10.0	10.0	0
Murray	3.0	7.3	4.3
Northern	5.0	6.8	1.8
UK	3.6	6.1	2.5
Louisville	4.5	8.2	3.7
Western	7.0	10.1	3.1

Source: United States. Dept. of Education. Office of Federal Student Aid.

The 3-year cohort default rate decreased from FY 2012 to FY 2015 for Eastern, Morehead, Northern, Louisville, and Western. UK had the lowest rate in FY 2015.

Table 6.6 is the 3-year cohort default rate of students from Kentucky's universities for FY 2012 and FY 2015. The rate decreased during this time period for five universities and increased for Kentucky State, Murray, and UK. In FY 2015, Kentucky State had the highest rate at 22 percent, nearly twice as high as other schools. UK had the lowest at 5.5 percent.

Table 6.6
Three-Year Cohort Default Rate Of Students From Universities In Kentucky
FY 2012 And FY 2015

University	FY 2012	FY 2015	% Point Change
Eastern	12.3%	11.7%	-0.6%
Kentucky State	20.7	22.0	1.3
Morehead	12.4	9.7	-2.7
Murray	8.0	10.4	2.4
Northern	10.9	9.5	-1.4
UK	4.3	5.5	1.2
Louisville	7.7	7.4	-0.3
Western	12.1	11.9	-0.2

Source: United States. Dept. of Education. Office of Federal Student Aid.

Student Loan Repayment Rates

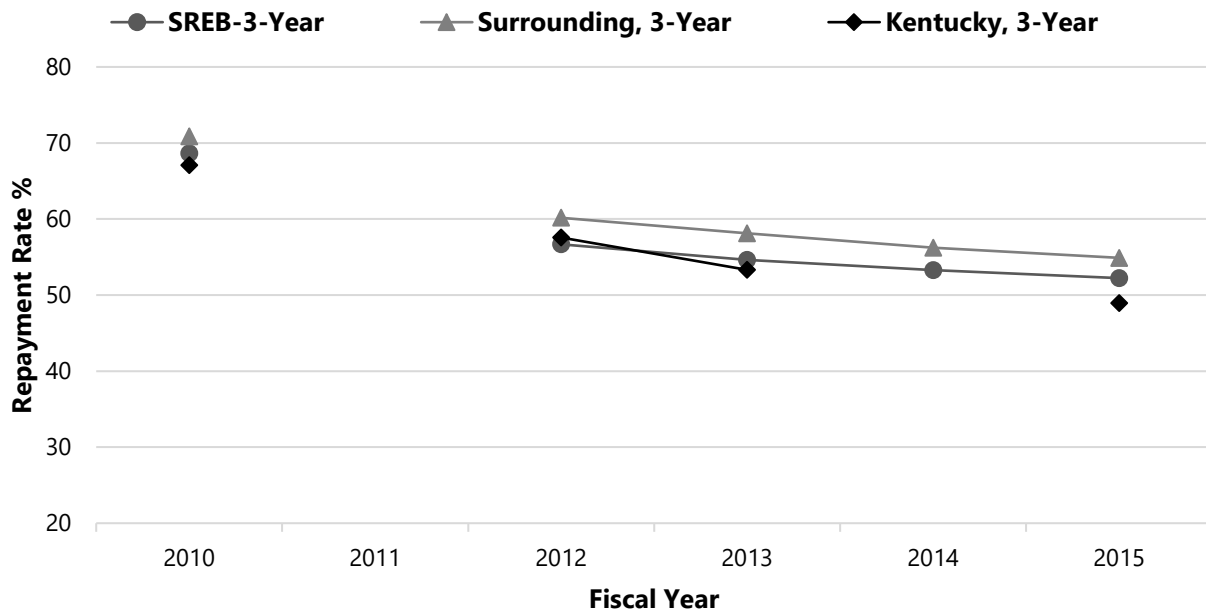
Repayment rate measures the fraction of students in repayment who have not defaulted and have paid down at least \$1 on the original student loan balance.

Repayment rate is another measure used to assess student progress in repaying loans. The term is defined by the US Department of Education as the fraction of a repayment cohort that is not in default and has paid at least \$1 on the original loan balance since entering repayment. Repayment rates capture students who enter deferments or forbearances, students who either temporarily stop or reduce payments, which are not captured by default rates.²² The 3-year cohort repayment rate, introduced in FY 2010, is currently used. It measures the percentage of students who enter repayment in the current fiscal year and have student loan balances that decline in the current or 2 following fiscal years.

Repayment rates for students from universities in Kentucky, surrounding, and Southern states declined after FY 2008, even as default rates declined.

Figure 6.F shows the average 3-year cohort repayment rates for students from universities in Kentucky, surrounding, and Southern states from FY 2008 to FY 2015. Kentucky's students had an average repayment rate of 49 percent in FY 2015. This was lower than the average rates in Southern (52.9 percent) and surrounding states (54.9 percent). Average repayment rates for Kentucky students are lower than repayment rates of students in surrounding states for all years lower for Southern states in 3 of 4 years. Average rates declined for all three groups over time. The trends differ for default rates (Figures 6.D and 6.E) and repayment rates. Default rates increased until FY 2013 and then decreased after FY 2013. Repayment rates declined over the same years, even as default rates declined. This implies that the percentage of deferments and forbearances increased.

Figure 6.F
Average 3-Year Cohort Repayment Rates Of Students From Universities In
Kentucky, Surrounding States, and Southern States
FY 2008 To FY 2015



Note: All data are missing for FY 2011, and data on Kentucky's universities are missing for FY 2014. Surrounding includes 83 universities; Southern includes 248 universities.
Source: United States. Dept. of Education. National Student Loan Data System for Students.

Kentucky's average 3-year cohort repayment rate is lower than most surrounding states. In FY 2015, the rate of 49 percent was the third lowest behind Ohio and West Virginia, which had rates of approximately 46 percent.

Table 6.7 shows the average 3-year cohort repayment rates of students from universities in Kentucky and surrounding states. Kentucky's average 3-year cohort repayment rate is lower than most surrounding states. In FY 2012, Kentucky's average rate was 67.1 percent. The highest average rate that year was 81 percent (Virginia) and the lowest was 62.3 percent (West Virginia). Rates for all states decreased over this time period. In FY 2015, Kentucky's rate was 49 percent. Virginia's rate of 68.3 percent was the highest, and West Virginia's rate of 46.3 percent was the lowest.

Table 6.7
Average 3-Year Repayment Rate Of Students From Universities
In Kentucky And Surrounding States
FY 2010 And FY 2015

State	FY 2010	FY 2015	% Point Decrease
Illinois	74.7%	59.5%	-15.2%
Indiana	71.4	52.2	-19.2
Kentucky	67.1	49.0	-18.1
Missouri	70.8	55.8	-15.0
Ohio	66.0	46.2	-19.8
Tennessee	62.9	49.1	-13.8
Virginia	81.0	68.3	-12.7
West Virginia	62.3	46.3	-16.0

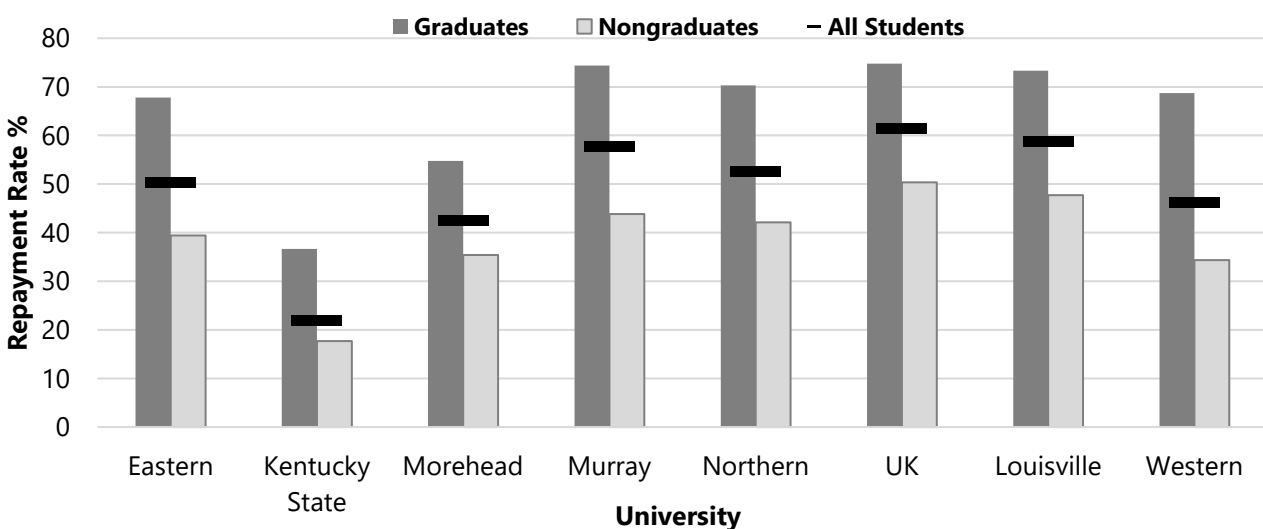
Note: Surrounding includes 83 universities.

Source: United States. Dept. of Education. National Student Loan Data System for Students.

For all universities in Kentucky, college graduates have higher student loan repayment rates than students who do not graduate.

Figure 6.G shows the 3-year cohort repayment rates of students by completion status and for all students combined from universities in Kentucky in FY 2015. For all universities, college graduates have the highest rates, ranging from 36.7 percent (Kentucky State) to 74.8 percent (UK). Rates for noncompleters range from 17.7 percent (Kentucky State) to 50.3 percent (UK).

Figure 6.G
Three-Year Repayment Rate Of Students
By Completion Status From Universities In Kentucky
FY 2015

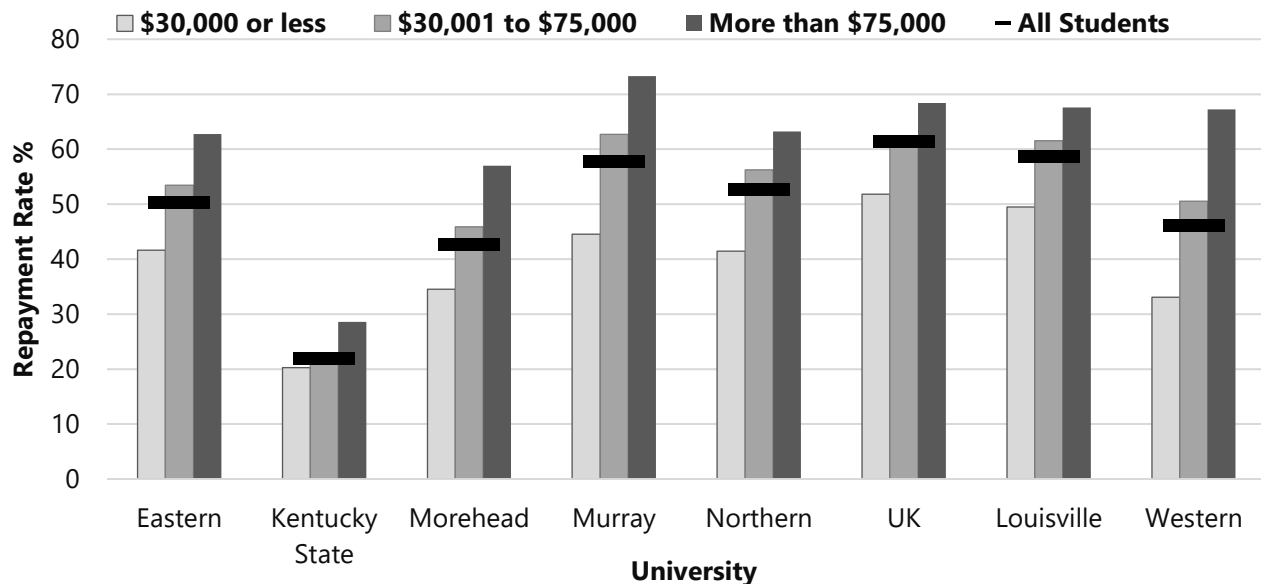


Source: United States. Dept. of Education. National Student Loan Data System for Students.

For all universities in Kentucky, students with the highest family incomes have higher repayment rates than students with lower family incomes.

Figure 6.H shows the 3-year cohort repayment rates by income level of students from universities in Kentucky for FY 2015. While there is no clear pattern in median debt by family income (Figure 6.C), repayment rates by family incomes show the same pattern across all eight universities. Students from the highest family incomes have the highest rates, and students from the lowest family incomes have the lowest rates for all universities. Students from all family incomes have the lowest rates at Kentucky State, ranging from 20.3 percent (lowest income group) to 28.6 percent (highest income group). UK has the highest rate for students from the lowest family incomes at 51.8 percent. Murray has the highest rate for students from the highest income families at 73.3 percent.

Figure 6.H
3-Year Repayment Rate Of Students By Income Level
From Universities In Kentucky
FY 2015



Source: United States. Dept. of Education. National Student Loan Data System for Students.

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Appendix

Data And Research Methods

University data are from the Integrated Postsecondary Education Data System (IPEDS) and the US Department of Education. Staff used three surveys from IPEDS, the Institutional Characteristics, Student Financial Aid, and Finance surveys.

The Institutional Characteristics survey includes data reported in academic years on tuition, fees, total cost of attendance, and other student expenses. Total costs of attendance are calculated as:

- In-State, On-campus Total Cost of Attendance = In-state tuition and fees + Books and supplies + Cost of living on-campus
- Out-of-state, On-campus Total Cost of Attendance = Out-of-state tuition and fees + Books and supplies + Cost of living on-campus

The Student Financial Aid survey includes data reported in academic years on students receiving financial aid by type, amount awarded, and net price. Net price, the total cost of admission minus the average amount of grant and scholarship aid, became available in 2009. Net price is calculated as:

- Net Price = (Published tuition and fees + Books and supplies + Weighted average of room and board and other expenses) – (Average federal, state, local and institutional grant and scholarship aid)
- Weighted average room and board and other expenses =
$$\frac{[(\text{on-campus room, board, and other expenses} \times \text{number of on-campus students}) + (\text{on-campus room, board, and other expenses} \times \text{number of on-campus students}) + (\text{off-campus room with family, board, and other expenses} \times \text{number of off-campus students living with family}) + (\text{off-campus room not with family, board, and other expenses} \times \text{number of off-campus students not living with family})]}{\text{Total number of students}}$$

The Finance survey includes revenue by source and expenses by function. Data are reported in financial years. All public universities included use Governmental Accounting Standards Board (GASB) financial reporting standards, except for the University of Delaware, which uses Financial Accounting Standards Board (FASB).

Staff used the US Department of Education's College Scorecard data received from the Kentucky Council on Postsecondary Education. The original data are from the department's National Student Loan Data System and Office of Federal Student Aid. Data are reported by fiscal year and include student loan debt and default and repayment rates.

Staff included data only from years 2000 to 2015, where available, on first-time, full-time degree seeking undergraduate students who attended the main campus of a public university in Kentucky, surrounding states, and Southern Regional Education Board member states. Staff excluded universities specializing in medical or health degree programs and universities that did not report data for two or more years. Universities with missing data are Augusta State

University, Middle Georgia State University, North Georgia University, Georgia Gwinnett College, University of Baltimore, University of Maryland – Baltimore, Texas AM - Texarkana University of Houston – Clearlake, University of Houston – Victoria, Governors State University, Athens State University, Lamar University, Southern University at New Orleans, New College of Florida.

IPEDS allows university staff to update some variables' information from previous years when submitting new surveys. For example, the academic year 2015 survey allowed staff to enter room and board costs for academic year 2015 and update costs from academic years 2012, 2013, 2014. The most recent updates for each year were used. Updates were available for books and supplies, on-campus room and board, and on-campus other expenses. Table 1 shows the last year these variable could be updated for each academic year.

Table 1
Academic Years Of Original
IPEDS Submission And Last
Update

Academic Year Of Initial Data	Academic Year Of Last Update
2015	2015
2014	2015
2013	2015
2012	2015
2011	2014
2010	2013
2009	2012
2008	2011
2007	2010
2006	2009
2005	2007
2004	2006
2003	2005
2002	2004
2001	2003
2000	2002

State and comparison group averages were calculated for university expenses, enrollment, net price, financial assistance, and debt. Averages were calculated by summing the relevant variable for all universities in the group and then dividing by the number of universities in the group. For example, Kentucky's average tuition and fees for academic year 2015 was calculated by summing tuition and fees at all Kentucky universities and then dividing by eight.

All dollar figures, except net price and US median household income, were adjusted to 2015 dollars using the CPI-All Urban Consumers Current Series Index from the US Bureau of Labor Statistics. Table 2 shows the factors used to adjust dollars, rounded to four decimal points. Values are multiplied by the factors to convert them to 2015 dollars. For example, an academic year 2000 value of \$100 would be multiplied by approximately 1.3764 to calculate that it would be worth about \$137.64 in academic year 2015.

Table 2
Index Factors To Adjust For Inflation

Academic Year	Inflation Adjustment
2000	1.3764
2001	1.3383
2002	1.3175
2003	1.2881
2004	1.2547
2005	1.2136
2006	1.1757
2007	1.1431
2008	1.1009
2009	1.1048
2010	1.0870
2011	1.0537
2012	1.0323
2013	1.0174
2014	1.0012
2015	1.0000

Source: US Bureau of Labor Statistics.

