



Tuition, Fees, And Other Costs At Kentucky Public Universities

Research Report No. 458

Program Review And Investigations Committee

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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 Kentucky universities but decreased at three. The average net price for Kentucky universities in 2015 was lower than the average for universities in four of seven surrounding states and in 9 of 15 other southern states. Depending on the Kentucky university, net price as a percentage of state 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 who received 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.

Foreword

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 for 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.

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

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Summary

The Program Review and Investigations Committee directed staff to examine how tuition, costs, and fees have changed over time at Kentucky's eight public universities. Two of the eight are research universities: the University of Kentucky and the University of Louisville. The six regional comprehensive universities are Eastern Kentucky, Kentucky State, Morehead State, Murray State, Northern Kentucky, and Western Kentucky. This report covers the role of the Kentucky Council on Postsecondary Education (CPE) in setting tuition and mandatory fees at universities; costs for students; the net price or true cost of a postsecondary education; financial aid; and undergraduate borrowing.

Kentucky Council On Postsecondary Education

CPE was created as an independent statewide agency under HB 1 of the 1997 Kentucky General Assembly. The 16-member council provides direction and oversight to Kentucky's postsecondary institutions. HB 1 outlined statewide strategic goals to be accomplished by 2020. CPE is responsible for determining tuition, approving minimum qualifications for admission to the state postsecondary education system, and crafting university budget recommendations (KRS 164.020).

CPE's process for setting tuition and mandatory fees involves CPE personnel and university officials. Prior to academic year (AY) 2009, universities had more discretion over their proposed tuition rates. In response to concern about the growth in tuition and fees, a new tuition and mandatory fee policy process was initiated that stressed transparency and 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 US National Center for Education Statistics' annual Integrated Postsecondary Education Data System (IPEDS) survey collects information on university costs and student expenditures. IPEDS data were used to estimate costs for first-time, full-time degree-seeking undergraduate students from AY 2000 to AY 2015. Unless otherwise noted, financial figures are adjusted for inflation. Universities in Kentucky were compared to universities in seven surrounding states and 15 states that are members of the Southern Regional Education Board. The latter states are referred to as southern states in this report.

In-state tuition and fees at universities in Kentucky more than doubled from AY 2000 to AY 2015. Kentucky's average in-state tuition and fees were lower than the averages in surrounding states for all years but have exceeded the averages at universities in southern states since AY 2004. Out-of-state tuition and fees at universities in Kentucky increased more than

80 percent from AY 2000 to AY 2015. Kentucky's average out-of-state tuition and fees exceeded averages for universities in surrounding and southern states.

The total cost of attendance is the sum of tuition, fees, books, supplies, room, board, and miscellaneous expenses before subtracting financial assistance. From AY 2000 to AY 2015, the total cost of attendance for an in-state student living on a Kentucky campus increased, depending on the school, by 32.8 percent to 88.1 percent. The average total cost for universities in Kentucky was similar to that for universities in southern states and lower than that for universities in surrounding states. From AY 2000 to AY 2015, the total cost of attendance for an out-of-state student residing on a Kentucky campus increased by 42.9 percent to 95.1 percent. The average total cost of attendance for universities in Kentucky was comparable to that for universities in southern states and lower than that for universities in surrounding states.

Net Price

One type of price that students face is the total cost of attendance. 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 IPEDS for academic years 2007 to 2015.

The average net price for Kentucky universities increased by 14.4 percent between academic years 2007 and 2015. In AY 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 since AY 2007. At universities in surrounding states, average net price increased by 11.3 percent. In southern states, the average increase was 16.2 percent. Net price as a percentage of median household income increased at seven of eight Kentucky public universities from 2007 to 2015, increasing by an average of 3.7 percentage points.

On average, state appropriations to Kentucky universities declined by 26.4 percent from FY 2000 to FY 2015. On average, the decrease was 33 percent for research universities and 21 percent for regional comprehensive universities. As state appropriations have declined, tuition revenues have increased. On average, tuition and fee revenue at Kentucky universities doubled from FY 2000 to FY 2015.

Budget data provided by Kentucky university budget officials indicate that 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 since FY 2006, and 12.8 percent for student financial aid, an increase of 4.2 percentage points.

Student Financial Aid

The three main sources of financial aid to assist students with the costs of postsecondary education are the federal government, state governments, and educational institutions. Grants, scholarships, and loans are the most common types of student financial aid awards. Federal aid

includes Pell Grant and Supplemental Education Opportunity Grants and other programs for low-income students. State aid includes grants, scholarships, and work-study programs primarily administered through the Kentucky Higher Education Assistance Authority. Typically, grants are awarded according to financial need, and scholarships are awarded on merit or ability. The Kentucky Higher Education Student Loan Corporation, the state's second largest source of financial aid, offers student loans.

More Kentucky students received state grants than other types of financial aid, but the average amount was lower for state grants than for other types. From AY 2000 to AY 2015, state awards remained flat while institutional awards increased. In 2015, 68 percent of students received state financial aid; the average amount was \$2,278. Institutional grants were given to 59 percent of students; 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 from 2000 to 2015 and a larger percentage received institutional grants since 2012. Since AY 2009, Kentucky awarded the largest average amount of institutional grants and the lowest average amount of state grants to students in all years.

In 2015, Kentucky awarded state grants to a higher percentage of students than all surrounding states except Tennessee, but the average amount was among the lowest. Among surrounding states, Kentucky ranked in the middle for 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. The 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 debt for graduates only was similar. In FY 2015, students in Kentucky had lower debt than students in four of seven 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 the rates 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 five of seven 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 in Kentucky and surrounding and southern states declined from FY 2008 to FY 2015. In FY 2015, students from universities in Kentucky had a repayment rate of 49 percent. Only two of seven surrounding states had lower rates.

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 public universities for academic years (AY) 2000 to 2015: two research universities (University of Kentucky, University of Louisville) and six regional comprehensive universities (Eastern Kentucky, Kentucky State, Morehead State, Murray State, Northern Kentucky, and Western Kentucky). Universities in Kentucky were compared to public universities in the seven surrounding states and in the 15 other member states of 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. The regional comprehensive universities are Eastern Kentucky University, Kentucky State University, Morehead State University, Murray State University, Northern Kentucky University, and Western Kentucky University.^a

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

The report excludes 8 specialized medical universities and 14 public universities that, for the time period observed, were missing any data from any of the variables analyzed. Unless otherwise noted, dollar amounts in this report have been adjusted for inflation to 2015 prices calculated with the nonseasonally adjusted Consumer Price Index for urban consumers. Academic years will be referred to using the second year of the period. For example, the academic year that begins in 2013 and ends in 2014 is denoted as AY 2014.

^a For simplicity, *university*, *university of*, *Kentucky*, and *state* will be omitted from most university names in this report. For example, the University of Louisville will be referred to as Louisville; Eastern Kentucky University will be referred to as Eastern. Unless otherwise noted, universities will be listed in tables and figures in the same order as in this paragraph.

^b The surrounding states are Illinois, Indiana, Missouri, Ohio, Tennessee, Virginia, and West Virginia. 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 such as 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 tuition and ceiling setting process of the Council on Postsecondary Education (CPE);
- 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 that CPE 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 IPEDS data from the following surveys: Student Financial Aid Survey, Institutional Characteristics Survey, and Finance Data Survey. 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. More information on 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 statute authorizes CPE to determine tuition. CPE reformed its policy for setting tuition and mandatory fees after AY 2009 to limit tuition increases by establishing tuition ceilings for universities. From AY 2010 to AY 2018, 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 AY 2003 to AY 2009.

- 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 attending UK or Louisville in AY 2015 was more than \$25,000. The total cost of attending Northern Kentucky was approximately \$21,000; for Kentucky State it was less than \$19,000. The price for any of the other four public universities was approximately \$20,000. Since AY 2000, 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 AY 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 AY 2015, net prices were \$8,206 for Kentucky State, \$9,173 for Northern, \$10,034 for Murray, \$10,638 for Western, \$11,568 for Morehead, \$12,492 for Eastern, \$15,981 for Louisville, and \$16,673 for UK. Since AY 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 AY 2015 was lower than the average for universities in four of seven surrounding states. The Kentucky price was lower than that in 9 of 15 other 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 decreased by more than 2 percentage points at Kentucky State since 2007 and was relatively stable at

Northern and Western. Percentage point increases at the other universities were Murray (3.6), Eastern (5.0), UK (6.8), Morehead (7.7) and Louisville (8.6).

- Approximately 93 percent or more of students at all Kentucky public universities received some type of financial aid in AY 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 per student. Average state grant aid was less than \$2,300.
- Kentucky's public university graduates have median student loan debt similar to that of graduates from universities in surrounding and southern 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. On average, 11 percent of Kentucky students defaulted on their loans within 3 years, which was higher than the average rate of 9 percent in surrounding and southern 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 those for public universities in other states. Chapter 4 explores net price, the true cost for postsecondary students. Chapter 5 describes financial aid available to students in Kentucky and compares financial aid in Kentucky to aid in 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 was created by the 1997 Kentucky General Assembly.

The General Assembly created CPE as an independent coordinating body in 1997 via HB 1 to improve Kentucky's public postsecondary education system, including the newly created Kentucky Community and Technical College System.¹ CPE was to address the economic and regional diversity that made it difficult to align Kentucky's public postsecondary education institutions with 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. 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 (KRS 164.003 and 164.0203(6)).

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

The governor appoints 15 of the 16 members of the council: 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 renewable term not to exceed 5 years. The president serves as the primary advocate for postsecondary education and as an adviser to the governor and the General Assembly (KRS 164.011; 164.013(4) and (7)).

Figure 2.A is a timeline for 2016–2017 as an example of the annual tuition and mandatory fee policy process CPE uses.

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

September	November	December And January	February	April	June
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

Source: Lee Nimocks, vice president for policy, planning and external relations, Council on Postsecondary Educ., et al. 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 process of setting tuition and mandatory fees begins toward the end of September with the appointment of council members to the Tuition Development Work Group. The group develops the preliminary timeline that it will follow and a draft of the tuition and mandatory fee policy for the upcoming academic year. The group will distribute 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 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 the December's CPE president's meeting.^a Key issues pertaining to the tuition-setting process are identified, and there is an initial discussion regarding tuition and fee ceilings. These issues are discussed again at the next month's CPE president's 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 president's meeting, council staff present draft tuition and fee ceilings to campus presidents for review and discussion.⁶ In mid-March, CPE staff meet with Tuition Development Work 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 AY 2009.

CPE's current tuition and mandatory fee setting process began following AY 2009. 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.

According to a 2007 policy brief from the Auditor of Public Accounts, which cited CPE's own reports, "tuition policy decisions at the state and institutional levels are having a detrimental impact on the achievement of the 2020 postsecondary education goals."¹⁰ CPE developed a new tuition and mandatory fee policy after AY 2007 in an effort to limit the annual growth of tuition increases and recognize the uncertainty of state appropriations for 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

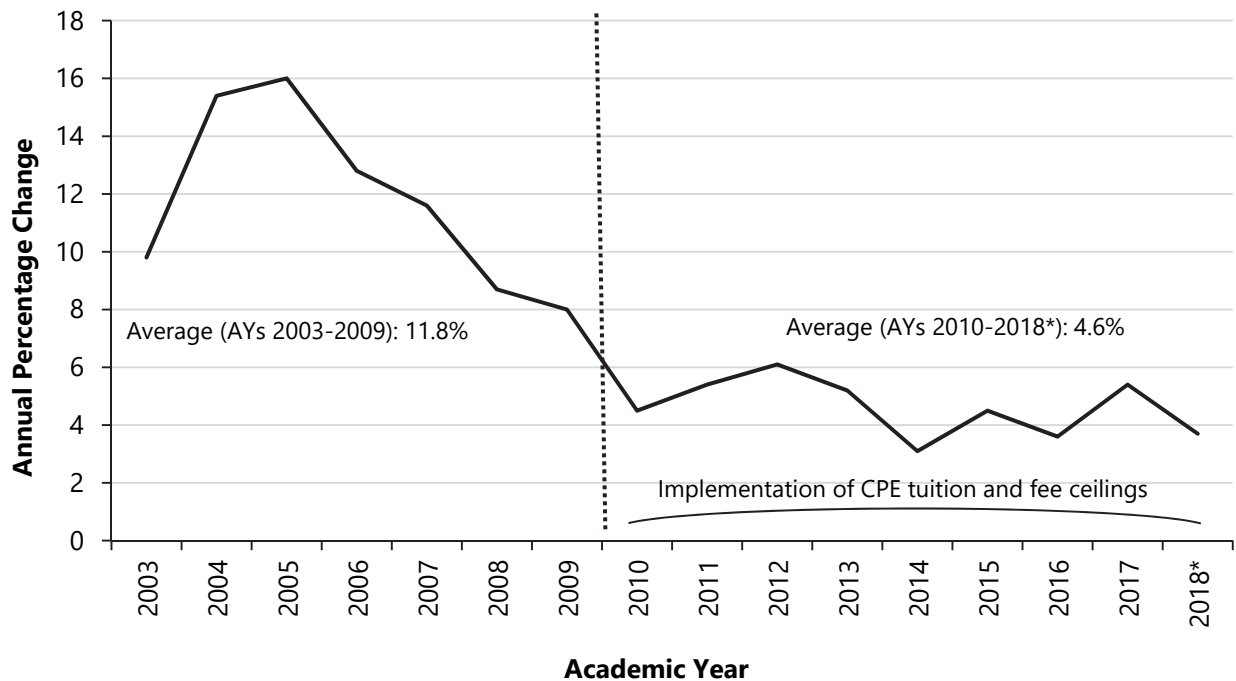
CPE’s tuition and mandatory fee policy sought to limit tuition increases for resident undergraduate students through the adoption of tuition ceilings.

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 2.B shows the system average annual percentage changes in resident undergraduate tuition fees for AY 2003 to AY 2018.

Figure 2.B
Annual Percentage Change In Tuition And Fees For Resident Undergraduates
Academic Years 2003 To 2018



*Proposed tuition for AY 2018.

Source: Kentucky. Council on Postsecondary Educ. 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 2010 to AY 2018. Tuition and mandatory fees had increased annually by an average of 11.8 percent from AY 2003 to AY 2009.

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 Percentage Increase Ceilings
Academic Years 2008 To 2018**

University	2008	2009	2010	2011	2012	2013	2014	2015/2016*	2017	2018
UK**	9	9	5	6	6	6	3	8	5	4
Louisville	12	9	5	6	6	6	3	8	5	0
Eastern***	9.5	7	4	5	5	5	3	8	5.3	5
Kentucky State***	9.5	7	4	5	5	5	3	8	5.9	5
Morehead***	9.5	7.4	4	5	5	5	3	8	5.4	5
Murray†										
Returning students	9.5	6.1	4	5	5	5	3	8	N/A	5
New students	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.4	5
Northern***	9.5	8.5	4	5	5	5	3	8	4.9	5
Western***	7.8	8	4	5	5	5	3	8	4.7	3

*CPE recommended tuition and mandatory fees for a 2-year period (AY 2015 and AY 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 AY 2017.

†Beginning in AY 2017, Murray charged different rates for new and returning students.

Source: Kentucky. Council on Postsecondary Educ.

In 2014-2015, CPE set tuition and fee ceilings for a 2-year period instead of annually. 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 2 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 returned to setting annual ceilings for AY 2017 and AY 2018 but recently adopted 2-year ceilings for AY 2019 and AY 2020.

In 2016, comprehensive universities requested a change from the common percentage increase that occurred every year since 2009

^b Proposed 2018 tuition rates were included in the calculation.

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 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 HB 1 Strategic Agenda goals and objectives.¹⁶

Chapter 3

Costs Of Attending Public Universities

The annual Integrated Postsecondary Education Data System (IPEDS) Survey, which collects information on university costs and student expenditures, 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.¹⁷ Survey sections on 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.¹⁸

Tuition And Fees

Annual tuition charges 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.

Adjusted for inflation, in-state tuition and fees more than doubled at each Kentucky public university from AY 2000 to AY 2015.

Table 3.1 has the annual in-state tuition and fees for eight public universities in Kentucky from AY 2000 to AY 2015. Adjusted for inflation, in-state tuition and fees more than doubled at each university. Increases ranged from 116 percent (Murray) to nearly 172 percent (Western). Initially, tuition and fees were similar among 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 those of any other university. In AY 2000, Northern's and Western's rates were similar to rates charged by Eastern, Kentucky State, Morehead, and Murray. Beginning in AY 2011, the rates were higher at Northern and Western than at those four universities, but they were lower than at UK and Louisville.

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

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

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

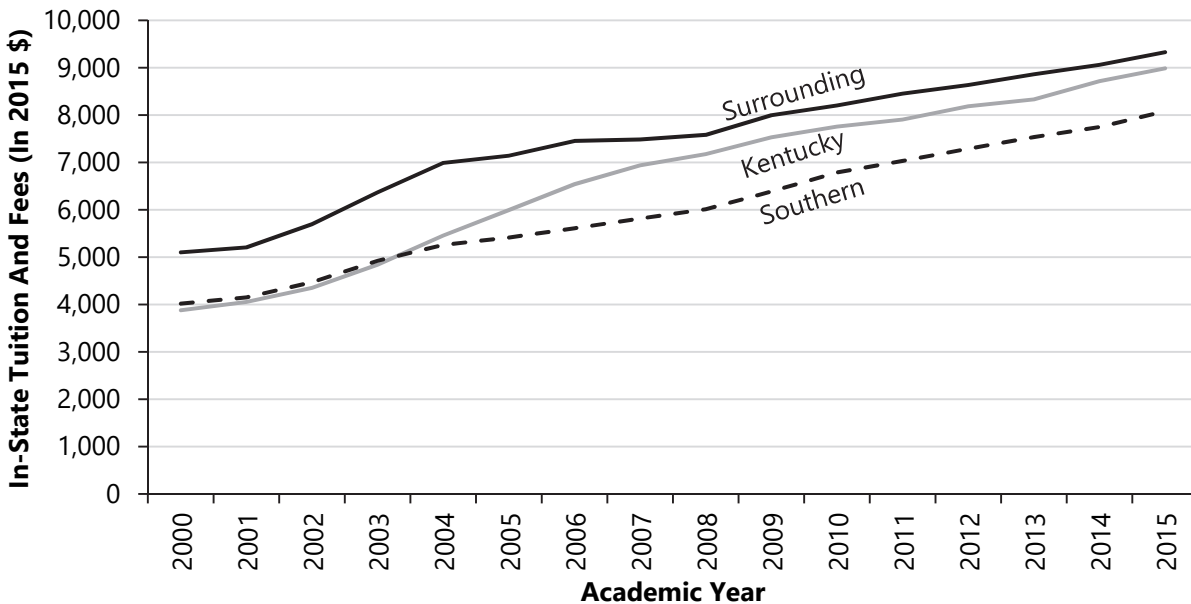
*Percentage change is from 2000 to 2015 for all schools except Morehead, for which it is from 2001 to 2015.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

From AY 2000 to AY 2015, average in-state tuition and fees for Kentucky universities was lower than the average for universities in surrounding states in all years but higher than the average for universities in southern states since AY 2004.

Figure 3.A compares the average in-state tuition of public universities in Kentucky with the average in-state tuition of public universities in surrounding and southern states. Average Kentucky tuition and fees was similar to the average in southern states in AY 2000 but has exceeded the southern 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: For surrounding states, averages are for 84 universities. For southern states, averages are for 193 universities for 2000 to 2014 and 191 universities for 2015.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

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 so that revenue will at least equal instructional and service costs.¹⁹

Out-of-state tuition increased more than 80 percent at each Kentucky public 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, ranging from 82 percent (UK) to nearly 157 percent (Western). 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	UK	Louisville	Eastern	Ky. State	Morehead	Murray	Northern	Western
2000	\$13.3	\$13.4	\$9.5	\$9.1	—	\$9.5	\$9.6	\$9.4
2001	13.8	14.0	10.4	8.9	\$9.6	9.9	9.5	9.9
2002	13.9	14.7	10.6	11.0	10.3	10.7	9.8	10.5
2003	14.5	15.7	11.3	12.0	11.5	12.0	10.3	10.9
2004	15.0	17.3	13.1	12.1	12.8	13.6	11.4	14.0
2005	15.5	18.3	15.9	13.2	13.9	14.6	11.8	15.5
2006	16.4	19.0	17.6	13.3	15.2	15.9	12.0	16.9
2007	17.0	20.3	18.1	14.3	15.2	16.8	12.3	17.7
2008	17.5	20.2	18.8	14.9	15.5	17.2	13.2	18.8
2009	18.4	21.3	19.6	15.5	16.7	17.9	14.1	19.6
2010	19.2	22.2	20.2	13.2	17.6	18.5	15.1	20.5
2011	19.7	22.8	20.1	13.5	18.3	18.9	15.9	21.1
2012	20.5	23.9	17.0	13.8	18.8	19.2	16.5	21.7
2013	21.6	24.2	16.9	15.3	19.1	19.5	16.8	22.6
2014	22.9	24.3	17.5	17.2	19.7	20.1	17.3	23.4
2015	24.3	25.1	17.6	18.1	20.2	20.7	17.9	24.1
%	82.4%	86.7%	86.2%	97.5%	110.0%*	118.1%	85.4%	156.5%
Change*								

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

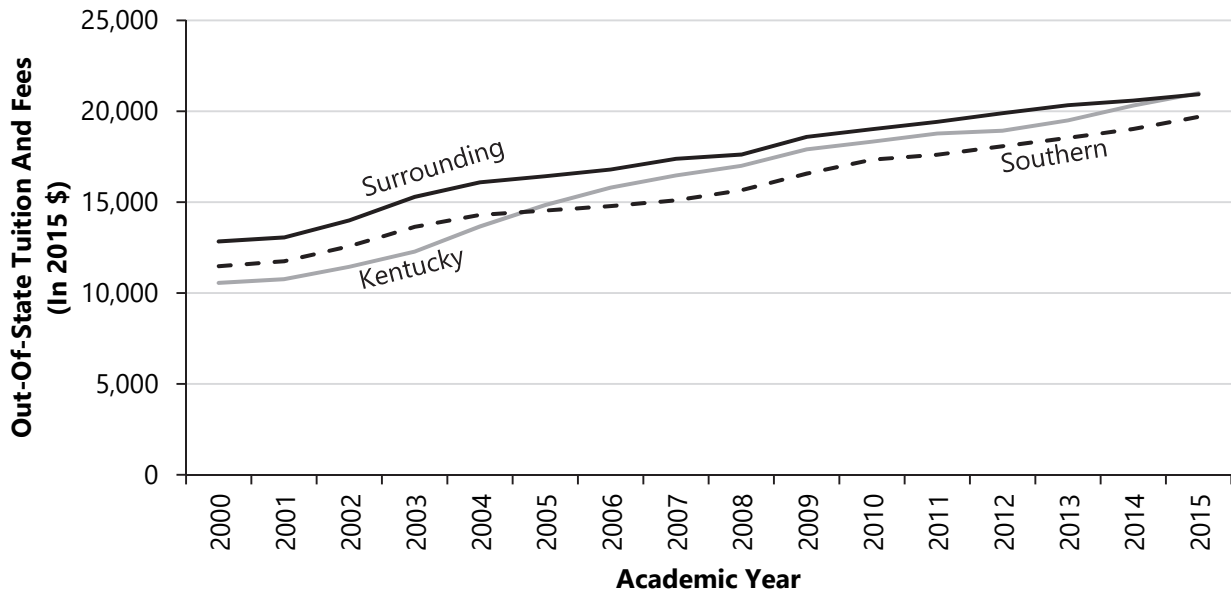
*Percentage change is from 2000 to 2015 for all schools except Morehead, for which it is from 2001 to 2015.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

Average out-of-state tuition and fees for Kentucky universities exceeded averages for universities in surrounding and southern states 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.²⁰ Kentucky's average out-of-state tuition and fees were initially below tuition and fees in both groups of states. Kentucky's tuition and fees totals 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: For surrounding states, averages are for 84 universities. For southern states, averages are for 193 universities for 2000 to 2014 and 191 universities for 2015.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

Books And Supplies

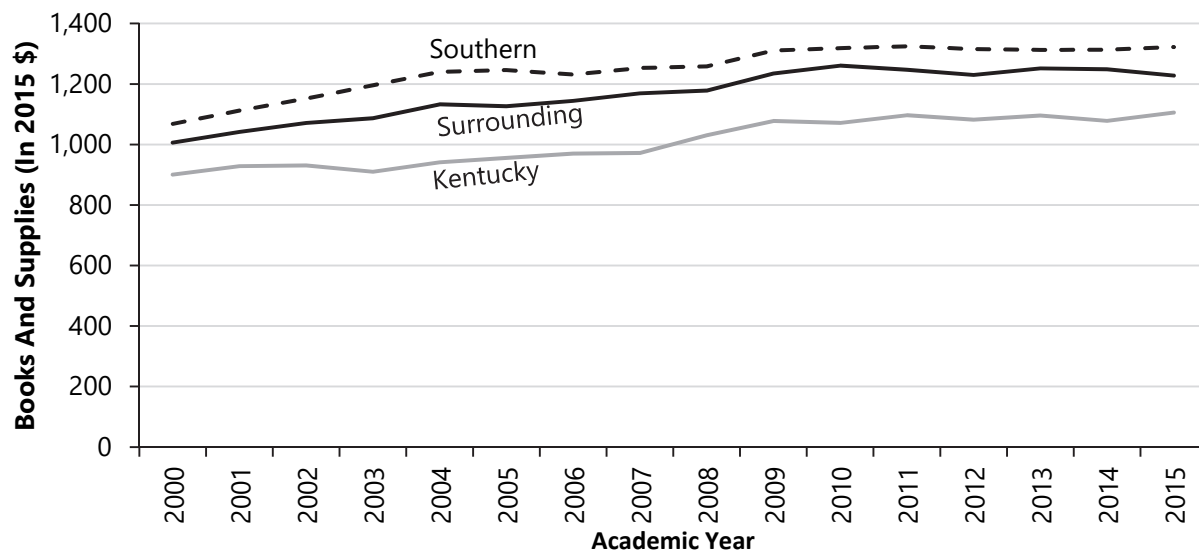
In AY 2015, the reported cost for books and supplies ranged from \$800 (Northern) to \$1,345 (Murray).

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 averages for those in surrounding and southern states 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 state 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. Average costs increased by 22.0 percent in surrounding states and by 23.8 percent in southern states.

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



Note: For surrounding states, averages are for 82 universities for 2000 to 2001 and 84 universities for 2002 to 2015. For southern states, averages are for 192 universities 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. This figure 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 the 2015 survey.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

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 estimate costs for students who live off campus. For the "other expenses" category,

financial aid offices estimate a total for 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 ranged from -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 those of 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. Louisville’s costs also decreased in AY 2008 after a change in how other living expenses were calculated.²¹ 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	UK	Louisville	Eastern Ky. State	Morehead	Murray	Northern	Western	
2000	\$9.1	\$13.3	\$7.1	\$5.6	\$6.7	\$7.3	\$8.1	\$7.4
2001	9.1	13.2	7.1	5.3	6.7	7.3	8.3	7.5
2002	9.9	16.6	7.2	7.4	6.9	7.3	8.7	7.2
2003	9.9	14.8	7.5	7.6	6.8	7.3	8.7	8.0
2004	10.5	11.7	7.7	7.8	7.0	7.3	8.9	7.9
2005	11.1	11.9	8.1	9.4	7.3	7.3	9.4	8.1
2006	11.7	11.8	8.3	10.0	8.2	7.7	9.4	8.1
2007	11.8	10.4	9.5	9.9	8.5	8.0	9.8	8.3
2008	12.1	10.1	9.9	10.1	8.4	9.4	10.3	8.1
2009	12.4	11.9	9.6	11.6	8.8	10.2	9.6	8.8
2010	12.7	12.0	10.2	11.4	9.7	11.4	9.6	8.9
2011	12.9	12.4	10.4	11.6	10.0	11.4	9.9	9.4
2012	12.9	12.1	10.4	11.5	10.1	10.5	10.0	9.2
2013	12.8	12.1	10.6	10.1	10.3	10.7	10.2	9.3
2014	13.7	12.9	10.8	9.5	10.5	10.7	10.9	9.0
2015	14.8	13.3	11.0	9.6	10.9	11.1	11.0	9.2
% Change*	63.0%	-0.2%	55.6%	70.4%	61.4%	51.6%	36.3%	25.2%

Note: Survey results for living costs are updated in future years. 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 the 2015 survey. Table values are rounded to the nearest \$100, so percentage changes shown may not equal changes for annual values shown.

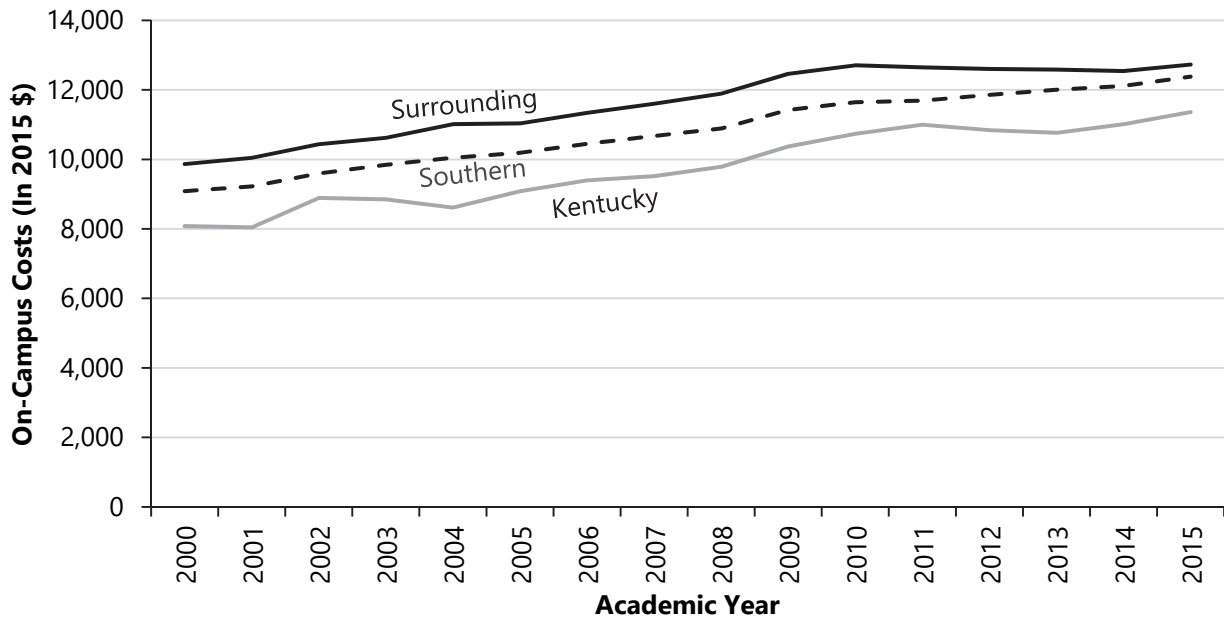
*Percentage change is from 2000 to 2015.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

Since AY 2000, Kentucky's average on-campus costs were lower than the averages in surrounding and southern states each year.

Figure 3.D shows the average on-campus living cost for universities in Kentucky and the two state groups. On-campus living costs were lowest in Kentucky 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: For surrounding states, averages are for 84 universities. For southern states, averages are for 193 universities for 2000 to 2014 and 191 universities in 2015. Survey results for living costs are updated in future years. This figure 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 the 2015 survey.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

Off-campus costs were not analyzed for this report because universities may estimate costs differently and entries were missing for some Kentucky universities.

IPEDS collects estimates of off-campus living costs from universities. LRC 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.²² Universities may measure off-campus costs differently. Off-campus costs were missing for multiple years for Eastern, Kentucky State, Morehead, Murray, and Western.

Total Cost Of Attendance

Since AY 2000, total cost of attendance increased the least at Louisville (nearly 33 percent). Costs increased by more than 80 percent at Kentucky State, Morehead, and UK.

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. Total cost varies depending on whether a student pays in-state or out-of-state tuition and whether the student lives on or off campus. Table 3.4 displays the annual total cost for in-state students living on campus from AY 2000 to AY 2015. 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. Over this period, the smallest increase was for Louisville, whose costs increased by nearly 33 percent. Costs increased by more than 80 percent at Kentucky State, Morehead, and UK.

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

Note: Survey results for living costs are updated in future years. 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 the 2015 survey. Table values are rounded to the nearest \$100, so percentage changes shown may not equal changes for annual values shown.

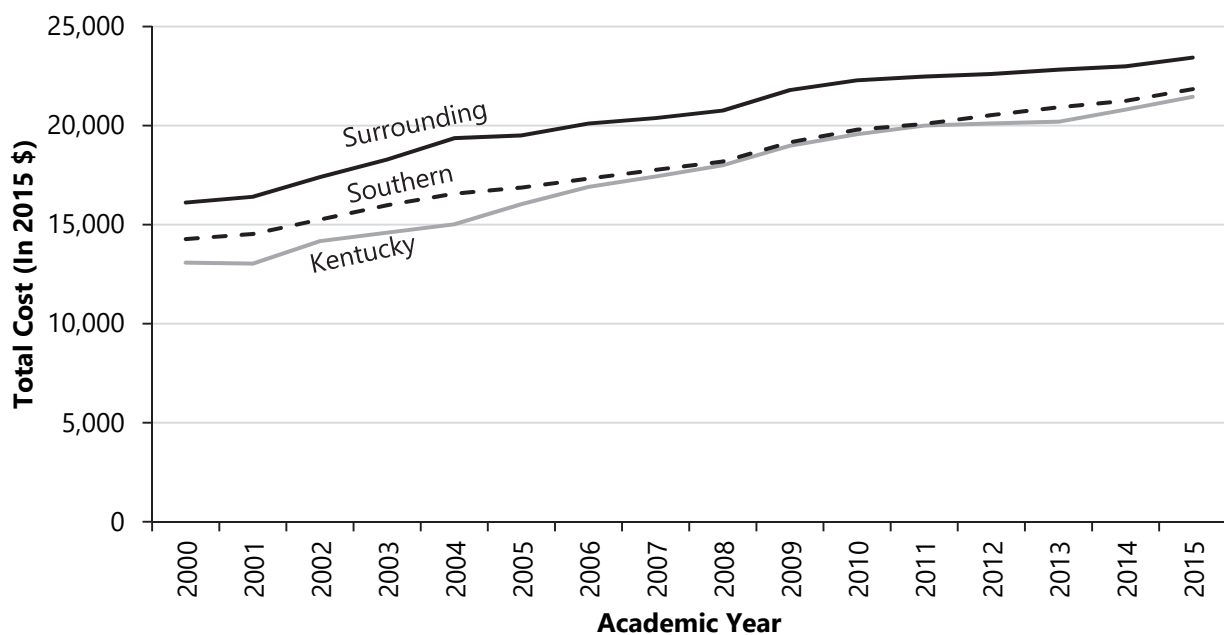
*Percentage change is from 2000 to 2015 for all schools except Morehead, for which it is from 2001 to 2015.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

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: For surrounding states, averages are for 84 universities. For southern states, averages are for 193 universities for 2000 to 2014 and 191 universities for 2015. Survey results for living costs are updated in future years. This figure 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 the 2015 survey.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

Since AY 2000, the smallest increase in total costs of attendance for out-of-state, on-campus students was at Louisville (less than 43 percent). Costs increased by more than 95 percent at Western and by more than 86 percent at Morehead and Murray.

Table 3.5 provides the annual total cost of attendance for out-of-state students who live on campus. Living on campus was more expensive at UK or Louisville than at the other universities, at approximately \$40,000 for AY 2015. Out-of-state charges for Morehead, Murray, and Western totaled \$32,000 to \$34,000. Costs at Eastern, Kentucky State, and Northern were less than \$30,000. Costs at Western increased by more than 95 percent since AY 2000. Costs increased by more than 86 percent at Morehead and Murray. Louisville's costs increased the least, less than 43 percent.

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

Note: Survey results for living costs are updated in future years. 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 the 2015 survey. Table values are rounded to the nearest \$100, so percentage changes shown may not equal changes for annual values shown.

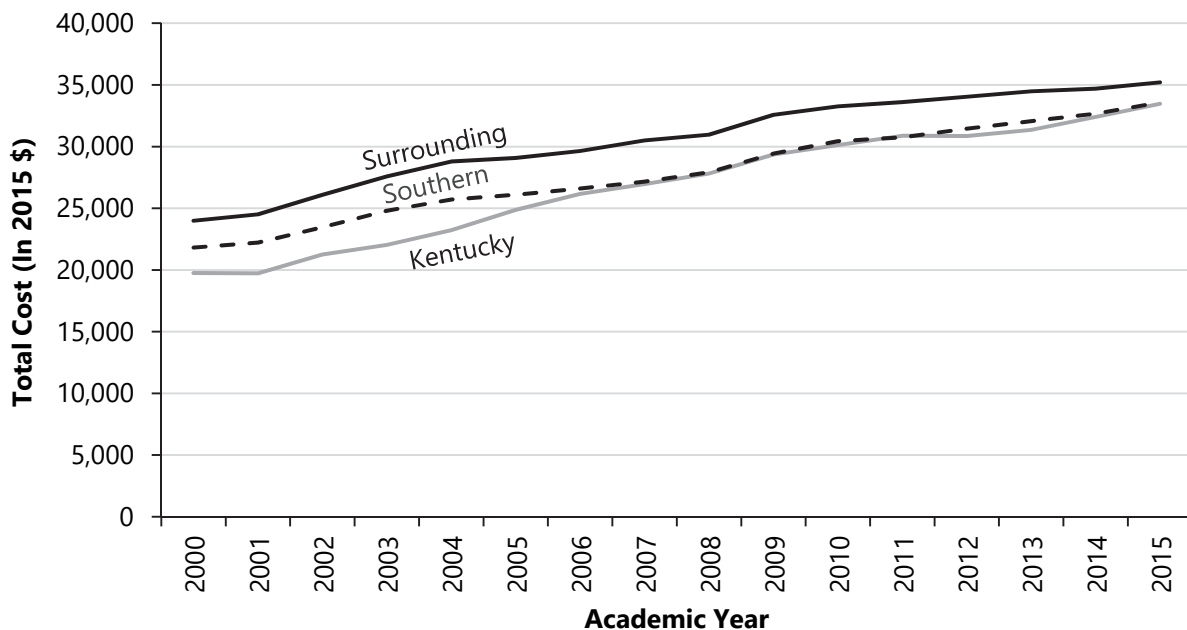
*Percentage change is from 2000 to 2015 for all schools except Morehead, for which it is from 2001 to 2015.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

Kentucky's average total cost of attendance for out-of-state students living on campus is similar to the southern states' average beginning in AY 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. As in the results for 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: For surrounding states, averages are for 84 universities. For southern states, averages are for 193 universities for 2000 to 2014 and 191 universities for 2015. Survey results for living costs are updated in future years. This figure 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 the 2015 survey. Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Institutional Characteristics Survey.

Enrollment

Since AY 2000, changes in enrollment for in-state students ranged from a 19.4 percent decrease (Kentucky State) to a nearly 48 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. Five of the eight 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 that of 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 2002 to AY 2015.

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

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

*Percentage change is from 2000 to 2015 for all schools except Kentucky State, for which it is from 2002 to 2015.
 Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System.
 Financial Aid Survey.

Table 3.7 displays out-of-state enrollment at Kentucky's universities. Enrollment increased more at UK than at any other Kentucky university, with a 260.5 percent increase from AY 2000 to AY 2015. Northern's enrollment increased by 88.4 percent, partially because of large increases in AY 2004 and AY 2014. Eastern's largest increases in 2002 and 2003 contributed to an increase of 48.8 percent. Louisville's enrollment initially decreased before recovering, resulting in an overall increase of slightly more than 1 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	UK	Louisville	Eastern	Ky. State	Morehead	Murray	Northern	Western
2000	430	339	172	-	201	401	388	482
2001	564	320	140	-	358	411	366	485
2002	527	270	266	197	353	492	401	538
2003	697	93	372	218	388	517	436	631
2004	734	133	411	54	323	553	538	739
2005	824	154	445	175	271	450	581	599
2006	916	185	439	204	228	468	510	542
2007	977	192	436	314	233	461	591	548
2008	937	257	437	386	283	428	601	513
2009	927	220	419	475	189	469	617	589
2010	851	253	363	309	163	424	658	590
2011	954	285	379	394	197	459	721	601
2012	978	237	318	353	175	549	737	672
2013	1,349	271	293	262	225	615	688	789
2014	1,319	307	273	312	187	625	826	837
2015	1,550	343	256	143	165	560	731	747
% Change*	260.5%	1.2%	48.8%	-27.4%*	-17.9%	39.7%	88.4%	55.0%

*Percentage change is from 2000 to 2015 for all schools except Kentucky State, for which it is from 2002 to 2015.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Financial Aid Survey.

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 percent to 66 percent. 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	UK	Louisville	Eastern	Ky. State	Morehead	Murray	Northern	Western
2000	83.7%	85.2%	91.4%	-	84.5%	65.6%	77.1%	80.0%
2001	80.5	85.8	91.5	-	75.0	66.3	77.6	79.9
2002	83.1	87.8	86.7	46.9%	77.9	64.9	76.9	79.1
2003	81.1	88.0	82.9	32.4	75.3	64.6	75.8	78.3
2004	80.0	94.0	83.3	14.7	79.3	62.7	72.7	75.1
2005	79.0	93.4	81.9	37.3	79.4	68.2	69.7	79.1
2006	76.1	91.8	82.4	49.9	82.7	67.6	71.0	82.4
2007	76.3	91.9	82.1	44.6	82.5	66.8	69.1	82.5
2008	75.6	89.8	82.0	41.7	80.5	69.4	68.3	83.1
2009	77.3	91.4	82.9	28.5	85.6	67.8	63.3	81.7
2010	79.3	89.6	83.2	41.3	84.8	69.2	69.9	82.1
2011	77.7	88.7	85.2	35.6	80.6	66.4	67.7	81.7
2012	76.0	90.6	86.6	35.5	83.8	63.6	66.8	79.6
2013	70.6	89.8	87.1	32.8	84.5	61.6	66.5	76.1
2014	71.4	89.1	88.5	39.9	85.7	60.2	62.8	72.7
2015	63.6	87.9	89.9	49.6	89.2	62.4	65.9	75.7

Source: United States, Natl. Center for Educ. Statistics, Integrated Postsecondary Educ. Data System, Financial Aid Survey.

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

Table 3.9 compares the percentage change in first-time, full-time enrollment at Kentucky universities from AY 2000 to AY 2015 to universities in surrounding and 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 at Kentucky universities than for either comparison group.

**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: Percentage change is based on sums for 81 universities in the surrounding states for 2000, 83 universities in 2001, and 84 universities for 2002 to 2015. For southern states, it is based on 90 universities in 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; the 2002 enrollment was used.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

Chapter 4

Net Price

This chapter begins with an overview of college affordability research. It then summarizes how the net prices of Kentucky universities have changed over time and how they compare to prices of universities in surrounding and southern states. Net prices are analyzed as shares of income in Kentucky and surrounding states. This is followed by a look at how tuition and fee revenue and state appropriations have changed over time for Kentucky universities and how universities' budgeted operating expense categories relate to these revenue sources.

Economic Research

College affordability is not just a matter of published college prices. It involves personal preferences and priorities, income levels of individuals and families, potential future financial returns, and income that students forgo 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.²³ Research shows that attending college has both social and economic returns for college graduates. College graduates might experience an income 7 percent greater than that of noncollege graduates.²⁴ Furthermore, research shows that college graduates may receive nonmonetary benefits, such as an increase in health consciousness, when controlling for income.²⁵

Table 4.1 shows the Kentucky state median annual earnings for 2006 and 2016, adjusted for inflation, by educational attainment for the population age 25 and older.

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 Associate's 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
% Change	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: United States. Census Bureau. 2016 American Community Survey.

Over the past decade, those with at least a bachelor's degree earn twice as much annually as those 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 this period.²⁶ Researchers have explored potential reasons for forgoing the potential economic returns that result from acquiring a college education. This exploration includes considering 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.

An analysis of over 20 studies on the relationship between price and enrollment indicates that as price goes up, the probability of enrollment tends to go down.²⁷ 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 children in families at the bottom of the income distribution.²⁸ Research indicates that minority students are more price sensitive to college costs than white students are.²⁹

Low-income and minority students are more responsive to changes in price.³⁰ A specific finding is that eligibility for \$1,000 of subsidy increases college attendance rates by approximately 4 percent for both low-income and minority students. Students who receive aid assistance are more likely to remain enrolled and complete a degree program.³¹

Average Net Price For In-State Students

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' Integrated Postsecondary Education Data System Student Financial Aid and Net Price Survey.³² The IPEDS data set includes data reported by CPE, which collects the data from Kentucky's postsecondary education institutions.

Average net price is the total cost of attendance for students paying in-state tuition, taking into account the average amount of federal, state, or local and institutional grant and scholarship aid.

Net price is the total cost of attendance for students paying in-state tuition minus the average amount of federal, state, or local and institutional grant and scholarship aid. 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.^a

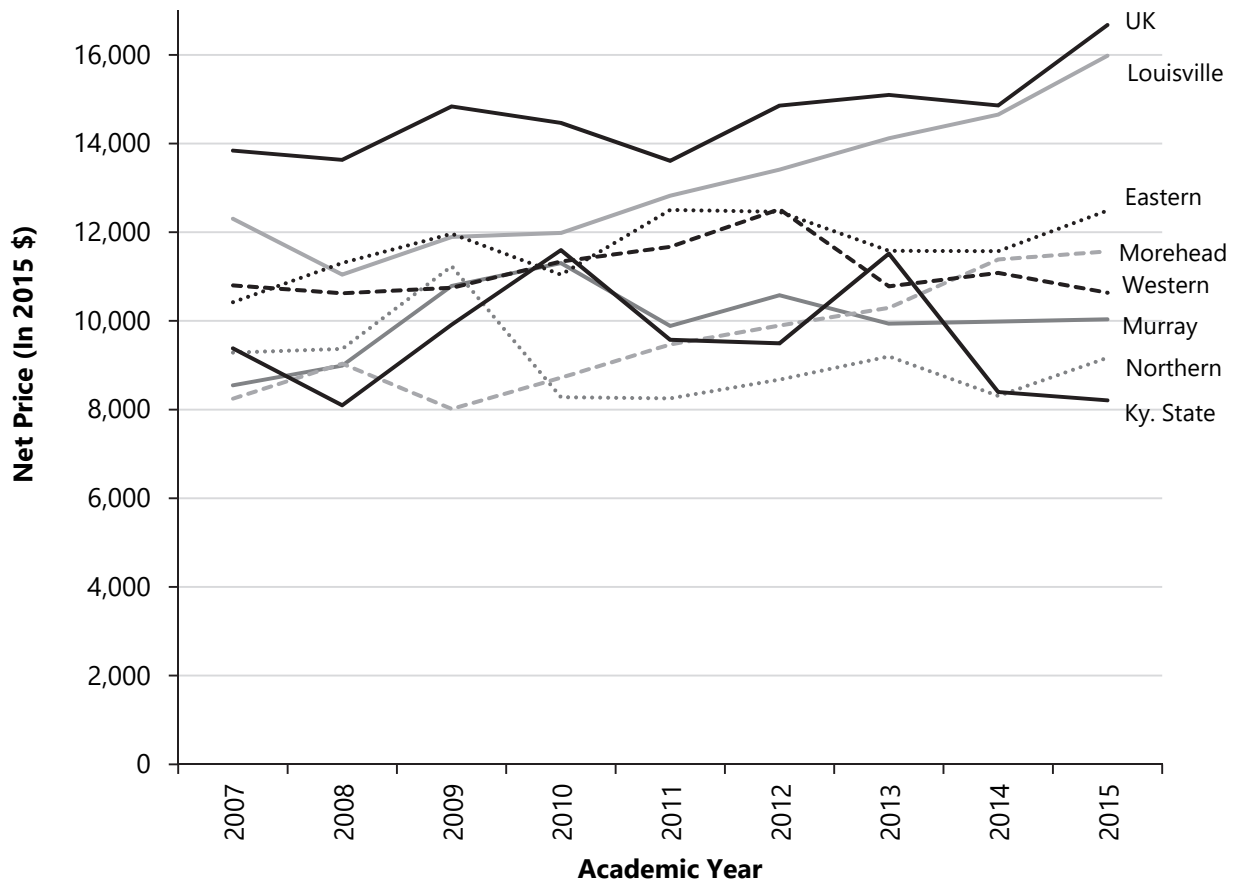
From AY 2007 to AY 2015, net price increased more than 20 percent at UK and nearly 30 percent at Louisville. Among the comprehensive universities, average net price decreased at Kentucky State, Northern, and Western. Net price increased 17 percent at Murray, nearly 20 percent at Eastern, and more than 40 percent at Morehead.

Figure 4.A displays the inflation-adjusted average net price for in-state students of Kentucky universities from AY 2007 to AY 2015.^b The net price at UK increased 20.5 percent from \$13,842 to \$16,673. At Louisville, the net price increased 29.9 percent from \$12,305 to \$15,981.

^a The Higher Education Opportunity Act of 2008 required universities to report net price. Through the College Navigator website, the Act also aimed to provide greater transparency with regard to the actual price that students may be paying. The IPEDS net price variable became available beginning in AY 2009, including data for the 2 previous academic years.

^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 For In-State Students Attending Kentucky Universities
(In 2015 Dollars)
Academic Years 2007 To 2015



Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey; authors' calculations.

Among the six comprehensive universities, average net price decreased at three universities:

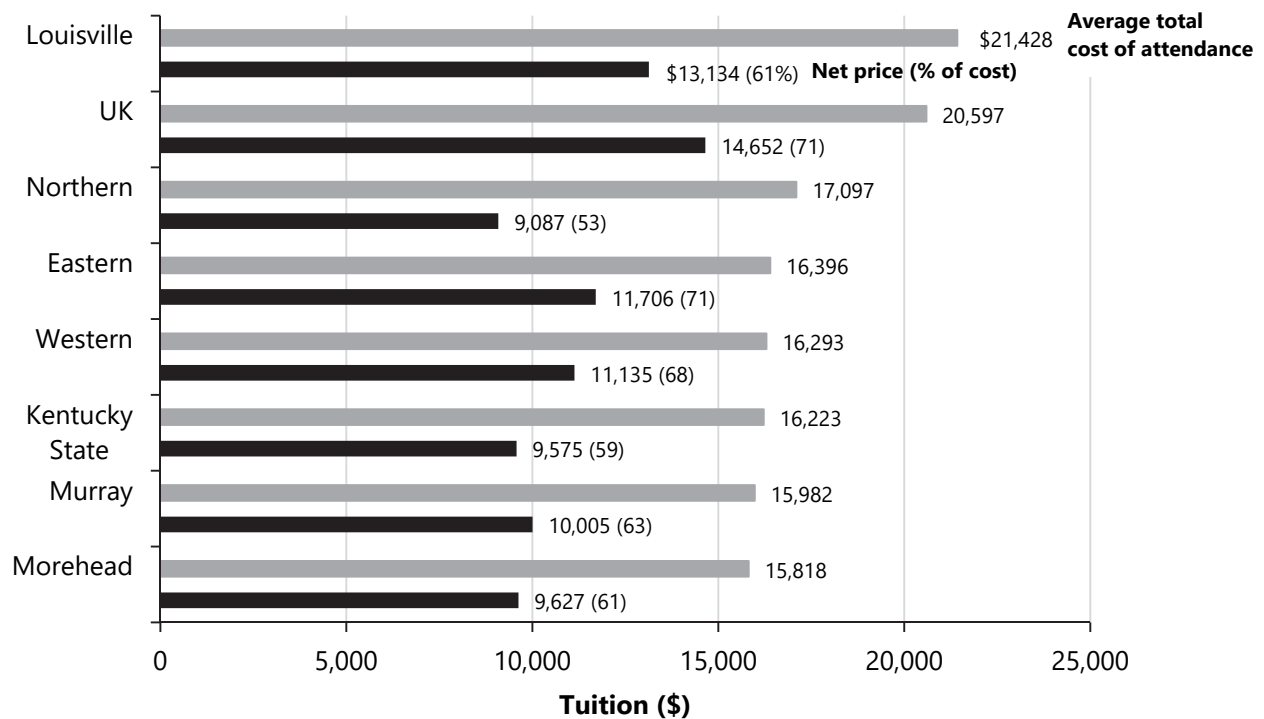
- Kentucky State, 12.5 percent from \$9,382 to \$8,206
- Western, 1.5 percent from \$10,801 to \$10,638
- Northern, 1.2 percent from \$9,288 to \$9,173

Net price increased at the remaining three:

- Murray, 17.4 percent from \$8,547 to \$10,034
- Eastern, 19.9 percent from \$10,423 to \$12,492
- Morehead, 40.3 percent from \$8,246 to \$11,568, which was the largest increase

Figure 4.B displays the average net price for in-state students and average total cost of attendance, which does not take financial aid to students into account. Universities are listed in order of highest to lowest total cost of attendance.

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



Source: United States. Natl. Center for Educ. Statistics/ Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

Kentucky had a lower average net price than four of seven surrounding states from AY 2007 to AY 2015.

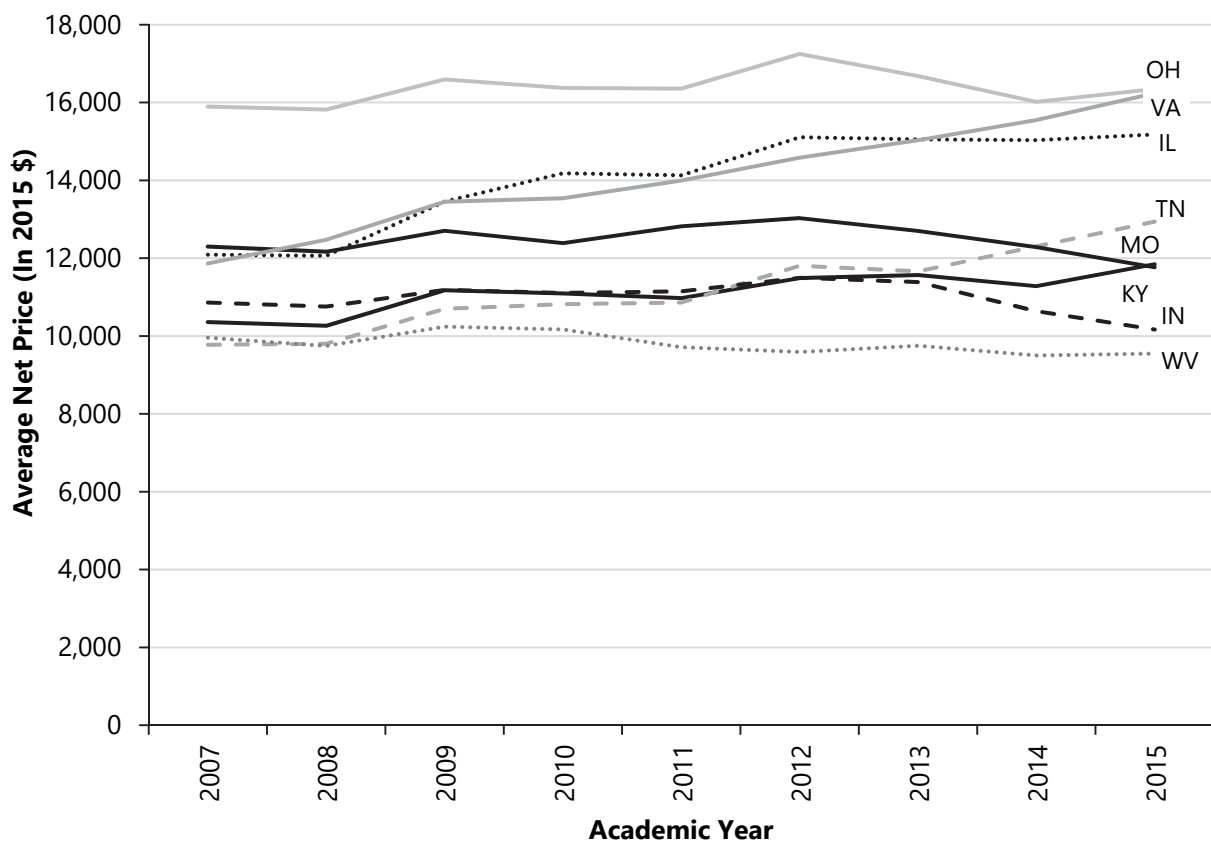
The largest difference between net price and total average cost of attendance was for Louisville, where net price was \$8,294 lower. UK’s average net price was \$5,945 lower than total cost.

Among the comprehensives, Northern had the smallest average net price and also the largest difference between net price and cost, more than \$8,000. Eastern had the smallest difference, \$4,690. Morehead had the lowest average total cost of attendance, \$15,818.

As a percentage of total cost, net price was 53 percent at Northern; approximately 60 percent at Louisville, Kentucky State, Morehead, and Murray; and approximately 70 percent at UK, Eastern, and Western.

Figure 4.C displays the inflation-adjusted average net price for in-state students attending universities in Kentucky compared to public universities in surrounding states from AY 2007 to AY 2015. The average net price for Kentucky universities was lower than the price at universities in four of seven surrounding states.

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



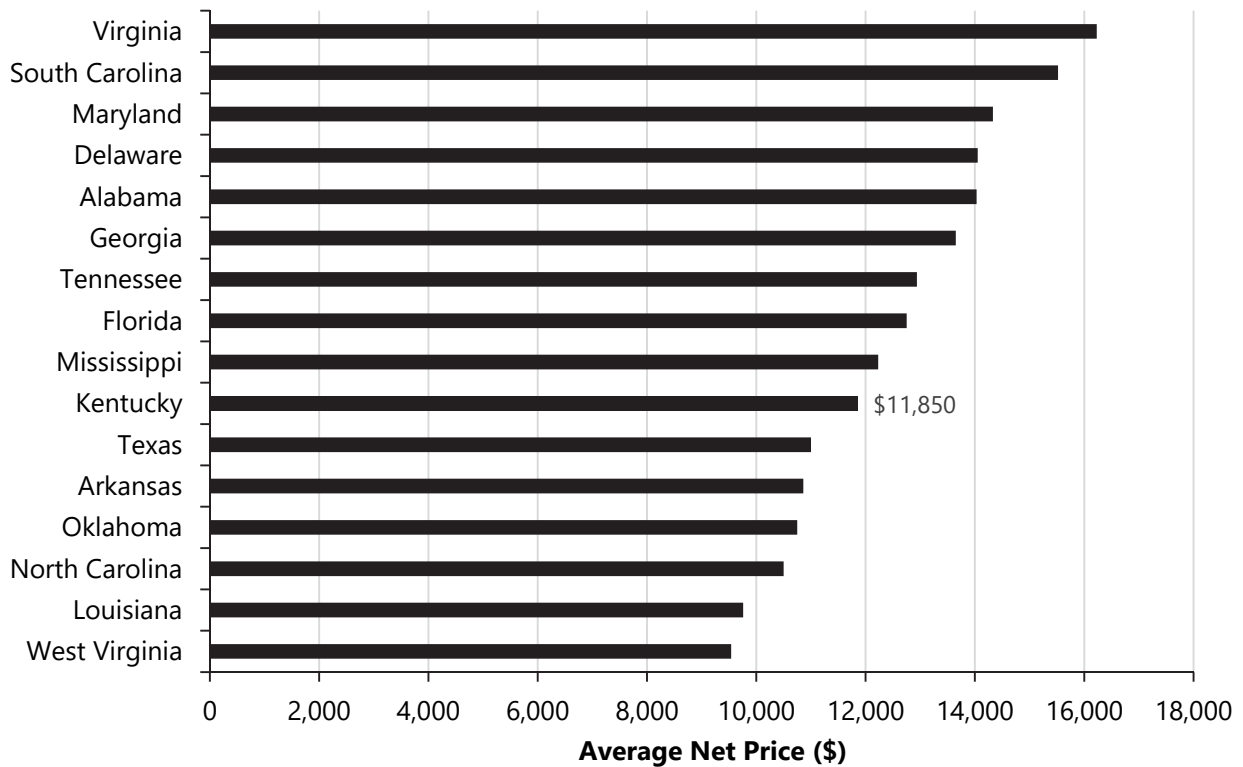
Note: Number of universities: 92 (Illinois 11, Indiana 14, Kentucky 8, Missouri 13, Ohio 13, Tennessee 9, Virginia 15, West Virginia 9).

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey; authors' calculations.

Kentucky's average net price increased by 14.4 percent, from \$10,354 to \$11,846. In three states, the percentage increase in net price was significantly higher: Virginia (36.8), Tennessee (32.4), and Illinois (25.6). In three states, the percentage increase was lower than in Kentucky: West Virginia (4.1), Missouri (4.3), and Indiana (6.4).

Figure 4.D displays the average net price for in-state students attending public universities in Kentucky and 15 other southern states in AY 2015. Kentucky had a lower average net price than universities in nine of the states.

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



Note: Number of universities: 196 (Alabama 13, Arkansas 9, Delaware 2, Florida 11, Georgia 16, Kentucky 8, Louisiana 14, Maryland 11, Mississippi 8, North Carolina 16, Oklahoma 13, South Carolina 12, Tennessee 9, Texas 30, Virginia 15, West Virginia 9). Missing data: Georgia (Kennesaw State University, Southern Polytechnic State University).

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey; authors' calculations.

Universities in Kentucky had an average net price of \$11,850 in AY 2015. This was lower 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 AY 2015. This was less than the total average net price for surrounding states (\$13,084) and southern states excluding Kentucky (\$12,543). Virginia had the highest average net price at \$16,230; West Virginia had the lowest at \$9,540. Comparing Kentucky to other surrounding states that are also southern states, only West Virginia had a lower total average net price.

As Share Of Income

Research shows that students from families with lower and middle incomes are more responsive to changes in the price of college.

Research shows that families with different income levels respond differently to changes in the cost of attending college. Students from families with low incomes respond to a \$1,000 grant by raising their probability of enrolling by approximately 11 percent, compared to 13 percent for medium-low and medium-high incomes, and 8 percent for high incomes.^{c 33}

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 price and income are 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

University	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
Ky. 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: United States. Census Bureau. American Community Survey 1-year estimates, not seasonally adjusted; United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey; authors' calculations.

^c The income brackets from the referenced study are 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).

In 2015, net price as a share of median income ranged from less than 20 percent (Kentucky State) to more than 35 percent (UK and Louisville). Among the comprehensive universities, the share was more than 25 percent at Eastern and Morehead.

In 2007, net price as a percentage of median income ranged from 17.9 percent to 30.1 percent, with only research universities having shares greater than 25 percent. In 2015, net price as a share of median income ranged from less than 20 percent (Kentucky State) to more than 35 percent (UK and Louisville). Among the comprehensive universities, the share was more than 25 percent at Eastern and Morehead.

From 2007 to 2015, the cost of attendance as a share of state median household income decreased for Kentucky State, was stable for Northern and Western, and increased 3.6 to 8.6 percentage points for the other five Kentucky universities.

The largest increase in net price as a share of income was for Louisville, where it went up 8.6 percentage points from 26.7 percent in 2007 to 35.3 percent in 2015. At UK, the increase was 6.8 percentage points, but UK's net price was the largest percentage of household income each year.

Kentucky State was the only public university for which net price as a share of median income fell, decreasing 2.3 percentage points from 20.4 percent to 18.1 percent. In 2015, net price as a share of income was virtually the same as it was in 2007 for Northern and Western. The biggest jump among the comprehensive universities was the 7.7 percentage point increase for Morehead. The other percentage point increases were Murray (3.6) and Eastern (5.0).

As shown in Table 4.3, average net price as a percentage of US median household income increased by 3.2 percentage points from 2007 to 2015 for Kentucky and surrounding states as a group.

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

State	2007	2008	2009	2010	2011	2012	2013	2014	2015
Illinois	20.8%	21.1%	24.3%	26.1%	26.6%	28.5%	28.3%	28.0%	27.2%
Indiana	18.7	18.8	20.2	20.4	21.0	21.7	21.4	19.8	18.2
Kentucky	17.9	17.9	20.1	20.4	20.6	21.7	21.8	21.0	21.2
Missouri	21.2	21.2	22.9	22.8	24.1	24.6	23.9	22.9	21.1
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
Virginia	20.5	21.8	24.2	24.9	26.3	27.5	28.3	28.9	29.1
West Virginia	17.2	17.0	18.5	18.7	18.3	18.1	18.3	17.7	17.1
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: United States. Census Bureau. American Community Survey 1-year estimates, not seasonally adjusted; United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey; authors' calculations.

Kentucky's average net price as a share of US median household income increased 3.3 percentage points from 2007 to 2015, an increase greater than that of four of seven surrounding states. Net price as a share of income declined for Indiana, Missouri, and West Virginia.

US median household income increased from \$50,740 in 2007 to \$55,775 in 2015. For Kentucky, average net price as a share of US median household income increased 3.3 percentage points from 17.9 percent to 21.2 percent, a larger increase than in four of seven surrounding states. The states with larger percentage point increases were Virginia (8.7), Illinois (6.4), and Tennessee (6.3). The increase in Ohio was 1.9 percentage points, but net price as a share of income was higher in Ohio in 2007 and 2015. As a share of income, net price decreased in Indiana, Missouri, and West Virginia.

State General Fund Appropriations And Tuition And Fee Revenue

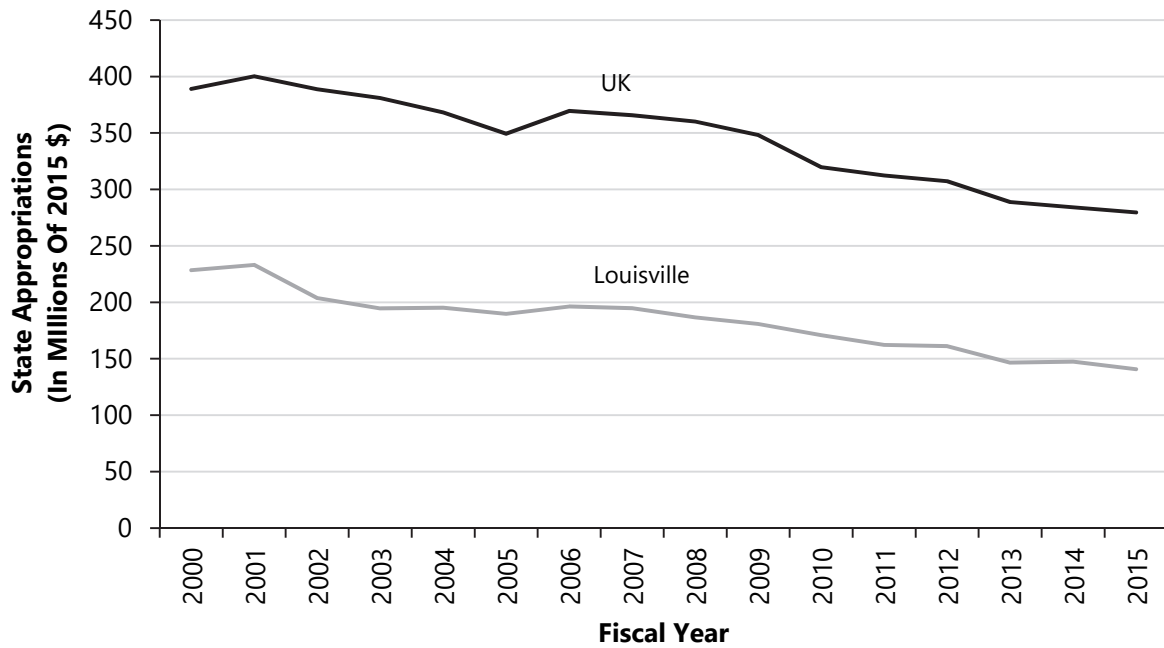
IPEDS defines *state appropriations* as amounts received by universities through acts of the state legislative body for meeting current operating expenses—not for specific projects or programs. The definition includes mandated programs, so comparisons between states may not be exact because of differences in what is mandated.

Adjusted for inflation, appropriations for both Kentucky research universities decreased from FY 2000 to FY 2015: 28.1 percent for UK and 38.4 percent for Louisville.

Figure 4.E displays the inflation-adjusted state general fund appropriations for research universities UK and Louisville from FY 2000 to FY 2015.^{d 34} State general fund appropriations decreased for both universities. For UK, appropriations decreased by 28.1 percent, from \$389 million in FY 2000 to \$279.6 million in FY 2015. Appropriations for Louisville decreased 38.4 percent over this period, from \$228.3 million to \$140.7 million.

^d State appropriations and tuition and fee revenue data used in this report are from the IPEDS Finance Survey for FY 2000 to FY 2015. All universities analyzed used Governmental Accounting Standards Board accounting standards except for those in Delaware, which use Financial Accounting Standards Board standards.

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

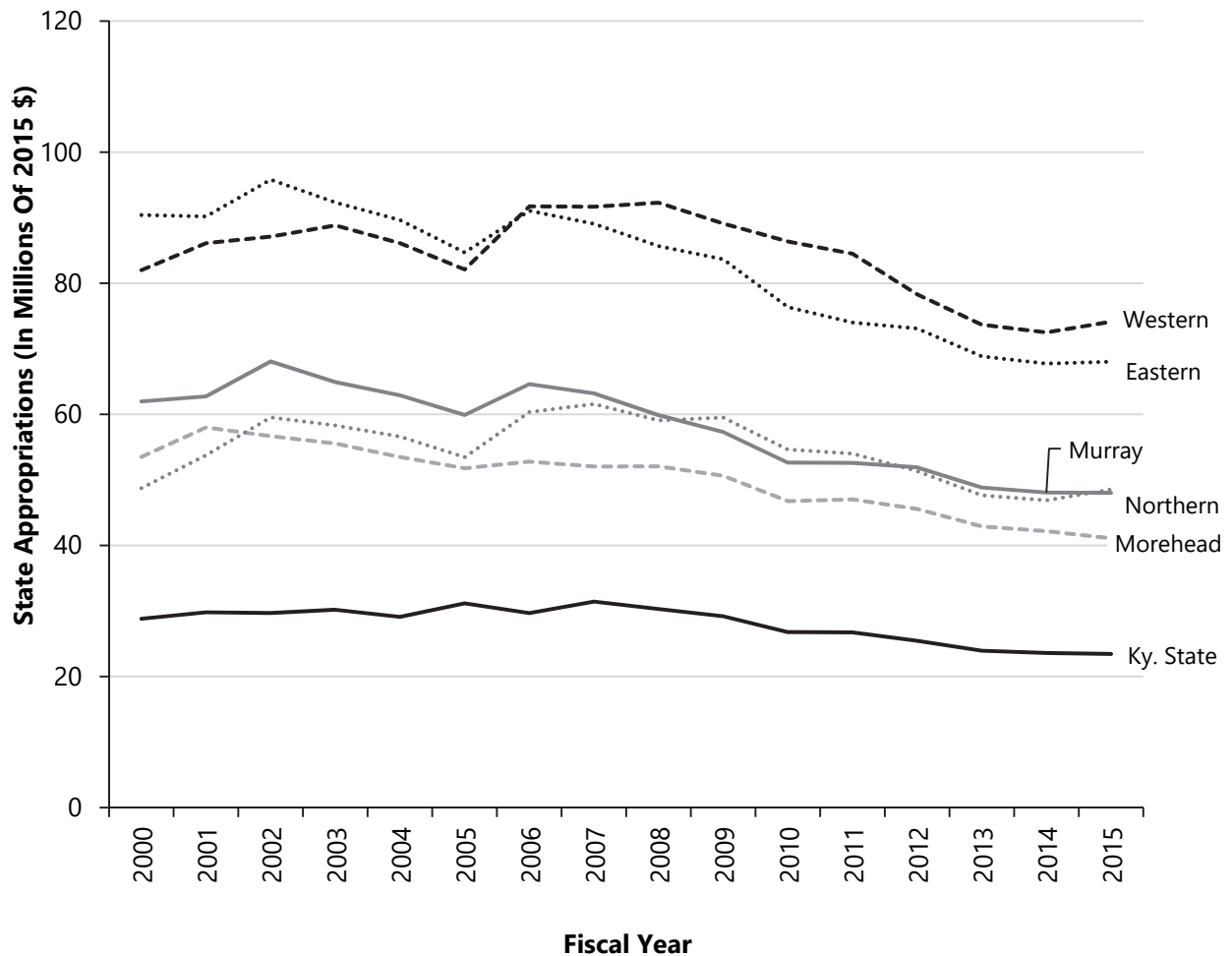


Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Finance Survey; authors' calculations.

Inflation-adjusted state general fund appropriations decreased by 0.4 percent for Northern, nearly 10 percent for Western, nearly 19 percent for Kentucky State, and more than 22 percent for Eastern, Morehead, and Murray.

Figure 4.F displays the inflation-adjusted state general fund appropriations for regional comprehensive universities from FY 2000 to FY 2015. Northern had the smallest decrease: 0.4 percent. Appropriations for the other universities decreased 9.6 percent for Western, 18.7 percent for Kentucky State, 22.5 percent for Murray, 23.2 percent for Morehead, and 24.8 percent for Eastern.

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

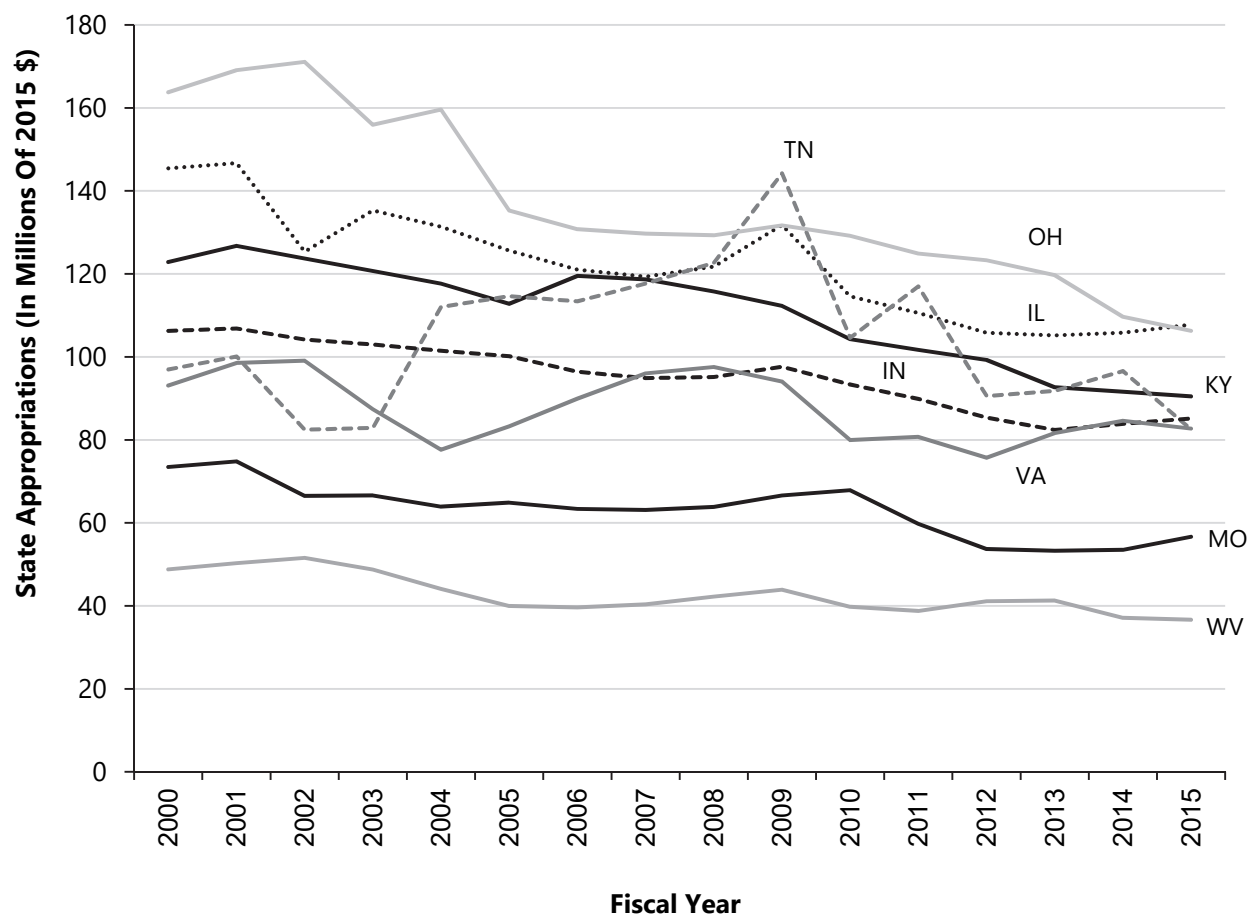


Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Finance Survey; authors' calculations.

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

Figure 4.G displays the average total state general fund appropriations for Kentucky and public universities in surrounding states from FY 2000 to FY 2015. In Kentucky, average appropriations declined from \$122.9 million to \$90.4 million. The 26.4 percent decrease was the second largest among these states. In Illinois, appropriations decreased by 35.1 percent. Percentage decreases in other states were Ohio (25.9), West Virginia (24.9), Missouri (22.9), Indiana (20), Tennessee (15), and Virginia (11.2).

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 (Illinois 11, Indiana 14, Kentucky 8, Missouri 13, Ohio 13, Tennessee 9, Virginia 15, West Virginia 9). Missing data: Ohio (Univ. of Cincinnati–Main Campus); Tennessee (Univ. of Tennessee–Chattanooga, 2002-2003; Univ. of Tennessee–Knoxville, 2002-2003; Univ. of Tennessee–Martin, 2002-2003).

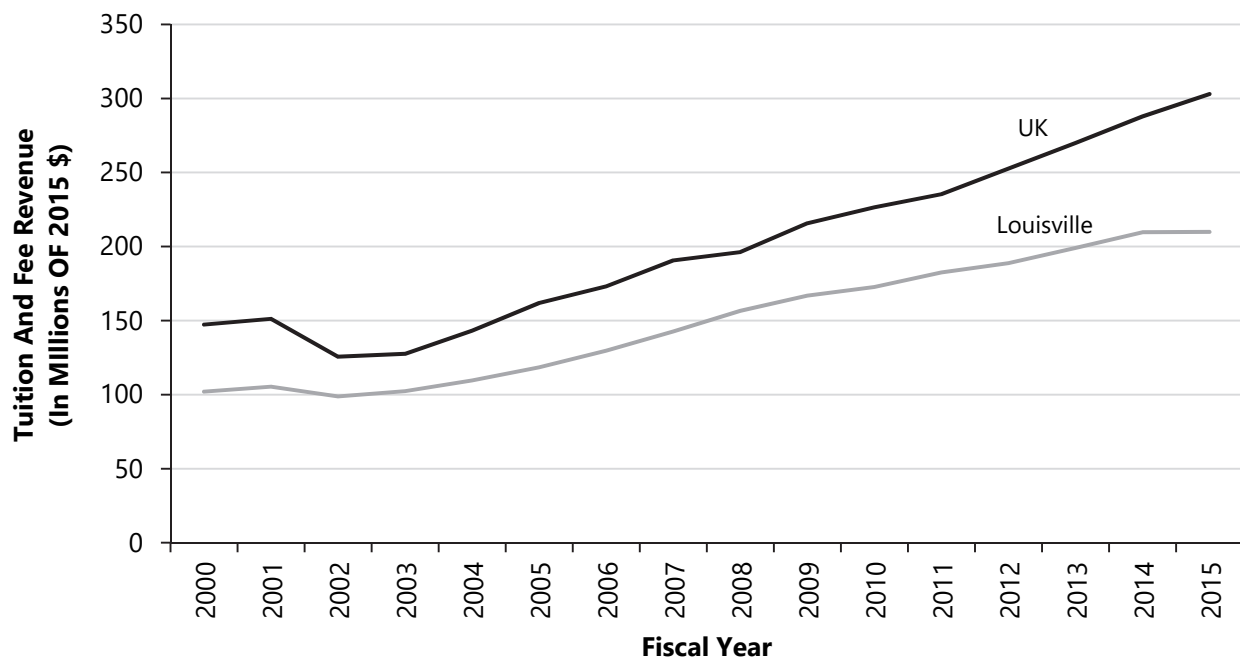
Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Finance Survey; authors' calculations.

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 The growth of tuition revenue reflects increases in enrollment and tuition rates.

At UK and Louisville, tuition and fee revenue doubled from FY 2000 to FY 2015.

At both research universities, tuition and fee revenue doubled. At UK, tuition and fee revenue increased 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 to \$209.8 million. The largest annual percentage increases were from FY 2004 to FY 2005 at UK (13 percent) and from FY 2006 to FY 2007 at Louisville (10 percent).

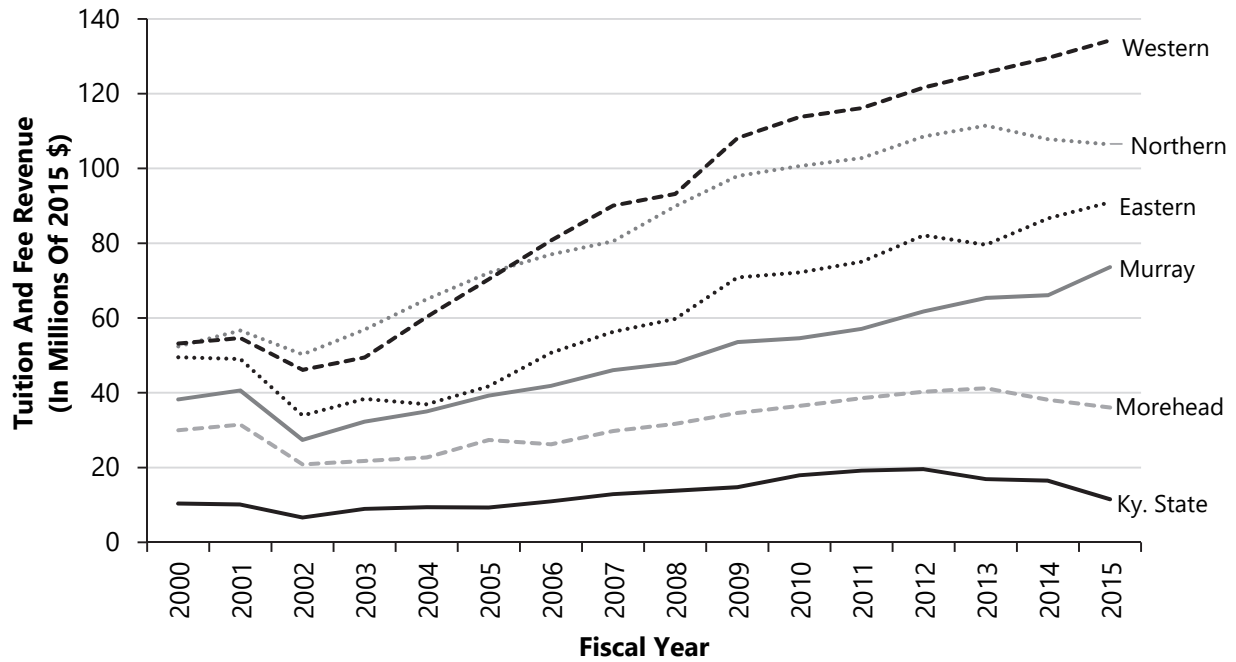
Figure 4.H
Tuition And Fee Revenue For Kentucky Research Universities
(In Millions Of 2015 Dollars)
FY 2000 To FY 2015



Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Finance Survey; authors' calculations.

^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



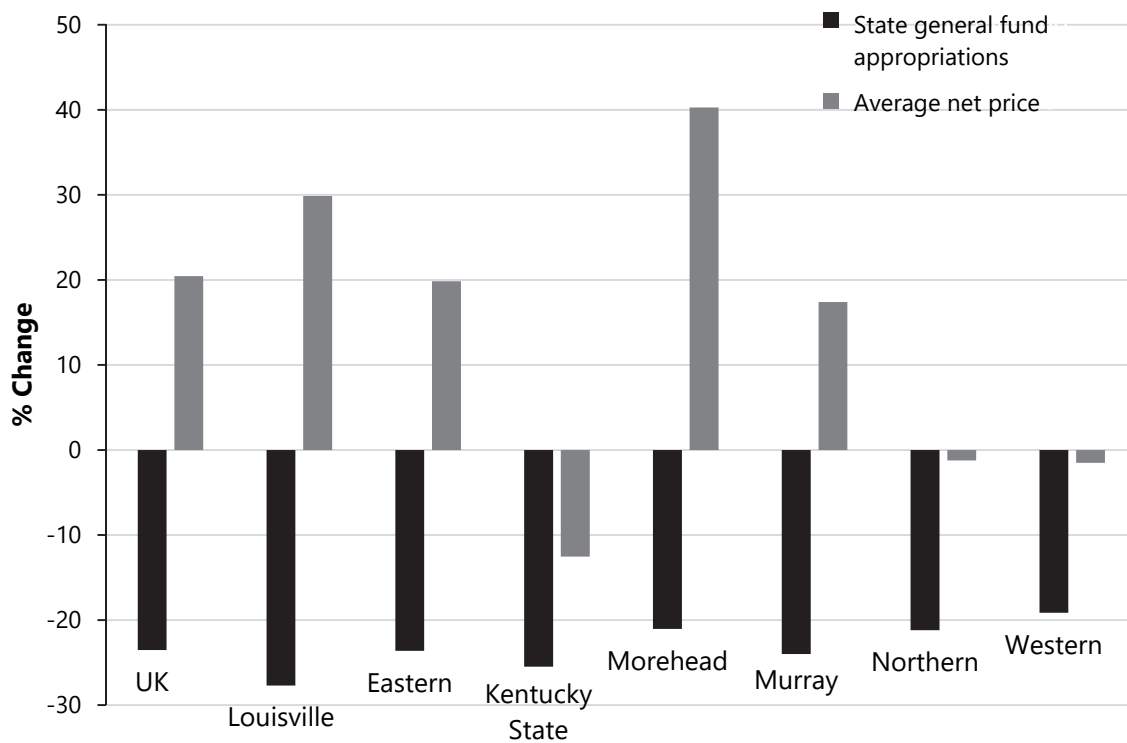
Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Finance Survey; authors' calculations.

Tuition and fee revenue also increased at all regional comprehensive universities over this period. The smallest percentage increases were for Kentucky State (11.2) and Morehead (20.3). Percentage increases at the other schools ranged from 84 at Eastern to 152 at Western.

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 increase of 152.4 percent was the largest. The smallest percentage increases were for Kentucky State (11.2) and Morehead (20.3). Percentage increases for the other regional comprehensive universities were Eastern (83.7), Murray (92.6), and Northern (103.1).

Decreases in state general fund appropriations and increases in tuition and fee revenue contributed to the higher net prices for students. The data show 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 five of eight Kentucky universities from FY 2007 to FY 2015. Kentucky State, Northern, and Western 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 And State General Fund Appropriations For Kentucky Universities (In 2015 Dollars) 2007 To 2015



Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid and Net Price Survey; authors' calculations.

University Revenue And Expenses

Universities use their revenue sources to provide an education to students and to fulfill their mission statements of providing an experience that will transform students' lives. 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 for which universities use these revenue sources 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 is 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. The data provided show only 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.

^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 mentioned in the 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 are not separately budgeted and general academic instruction conducted by the teaching faculty for the institution's students. *Student services* includes 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 parts 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. *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.

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

Table 4.4
Total Expenses As A Percentage Of Total Public Funds Revenue By Expense Category
FY 2006 And FY 2017

University	Instruction		Student Services		Academic Support		Institutional Support		Student Financial Aid	
	2006	2017	2006	2017	2006	2017	2006	2017	2006	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	40.6	37.5	7.8	8.4	6.7	10.7	18.0	12.6	10.4	16.4
Ky. State	25.8	24.0	22.5	10.9	2.8	17.4	11.6	19.3	4.2	10.0
Morehead	41.6	28.7	9.0	13.3	7.3	6.9	13.7	13.1	9.5	15.3
Murray	36.8	33.4	9.1	8.3	4.0	3.0	10.6	14.3	18.6	25.6
Northern	39.5	33.3	7.5	10.4	9.8	10.0	14.4	13.5	6.1	12.9
Western	39.8	34.8	1.2	1.1	11.1	11.6	15.0	16.3	4.7	10.6

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

Source: Kentucky university budget officials; authors' calculations.

The largest expense at all Kentucky universities is instruction. However, the percentage contributed as a share of revenue declined for all schools 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. The percentage contributed decreased for all except Louisville. Morehead had the greatest decline, 12.9 percentage points. The second largest expense varied among the universities.

From FY 2006 to FY 2017, student financial aid increased as a share of total public funds revenue for all eight universities. At UK and Louisville, the increases were less than 4 percentage points. At the regional universities, percentage point increases ranged from 5.8 at Kentucky State and Morehead to 7 at Murray.

Kentucky State had some of the greatest percentage point changes from FY 2006 to FY 2017. Institutional support increased by 7.7 percentage points. Academic support increased 14.6 percentage points. Student services decreased 11.6 percentage points.

[§] 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 transfers 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.

Chapter 5

Student Financial Aid

The three main sources of financial aid to assist students with costs of postsecondary education are the federal government, state governments, and educational institutions.

The three main sources of financial aid to assist students with the costs of postsecondary education are 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.³⁵ Scholarships are not repaid and are typically competitively awarded to students based on ability, such as athletic, academic, or musical talent. Tuition waivers eliminate some tuition costs for students who meet certain criteria. Conversion scholarships or grants are awarded in exchange for 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 1965.³⁶ 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 loans while a student is enrolled in school.

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.

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 1980 reauthorization 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

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

loan consolidation, repayment and forgiveness, and student loan accessibility.³⁷

Kentucky

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.³⁸ KHEAA, created in 1966, is the largest source of state aid, administering programs that offer grants, scholarships, and work-study awards.³⁹ 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.⁴⁰ 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 2016.⁴¹

**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 Educ. 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 applying for need-based financial aid complete the Free Application for Federal Student Aid to determine the amount of federal need-based aid. Universities then create a package of aid from all sources, including the university. Students are often required to get the maximum amount of federal need-based 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 2017.⁴²

**Table 5.2
 Types Of Financial Aid Awards Offered By Kentucky Public 4-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 leadership 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 skill sets or talents
Transfer student scholarships	For transfer students meeting certain qualifications
Work-study programs	Based on a work-service contract

Source: Kentucky Higher Educ. Assistance Authority.

National Trends In Financial Aid

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

Total federal grant aid increased from AY 2006 to AY 2011 and then decreased.⁴³ The percentage of undergraduates receiving federal Pell Grants (financial need-based grants) increased from 25 percent to 37 percent from AY 2006 to AY 2011, and was 33 percent in AY 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 2008.⁴⁴ 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.⁴⁵ On average, the amount of inflation-adjusted state support for student financial aid increased from AY 2008 to AY 2015.⁴⁶ However, state aid per student was lower in FY 2015 than in FY 2008.⁴⁷

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.

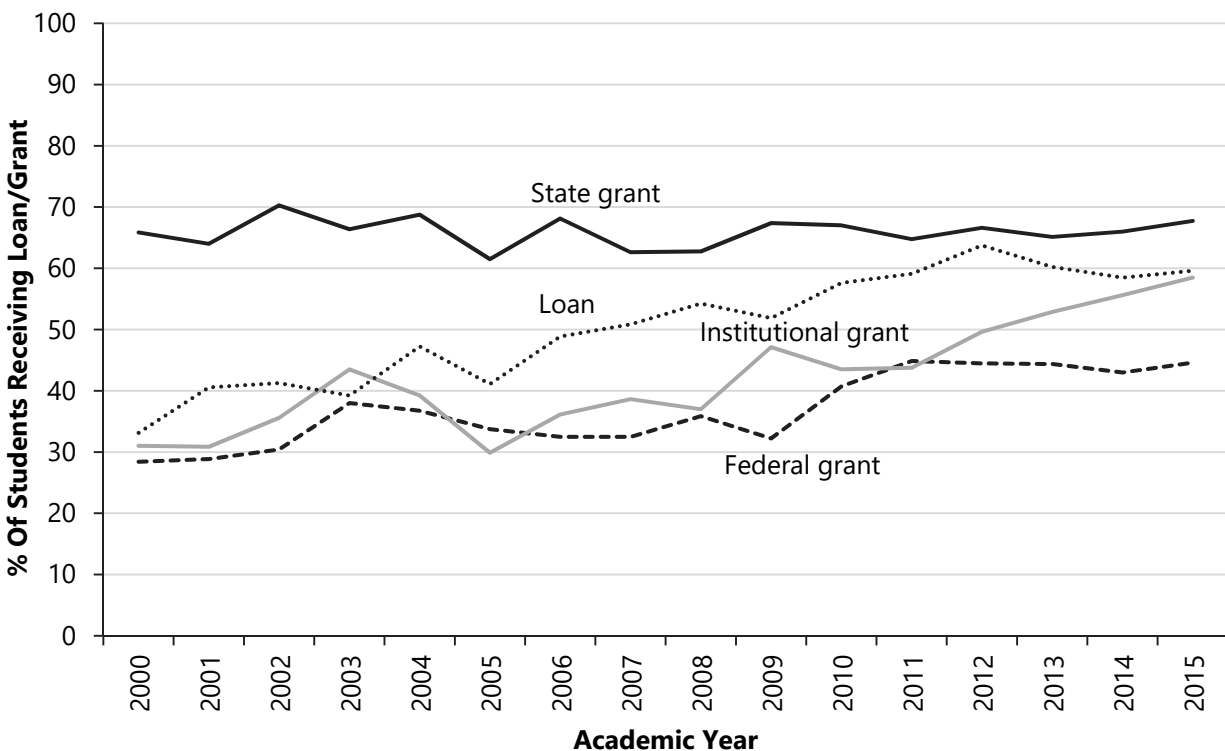
Through the Student Financial Aid Survey, IPEDS collects data on the percentage of students receiving federal, state or local (hereafter referred to as state), and institutional grant aid awards by academic year.⁴⁸ It also includes the percentage of students receiving a student loan and the average amount 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 money awarded to universities for student financial aid programs. Institutional grants are scholarships and fellowships awarded by the university or departments within the university.^b Loans include all student loans from the federal government, universities, or private entities but not loans from parents.

^b Data on institutional grant aid does not include grant aid received by the universities from unaffiliated foundations.

The largest percentage of students in Kentucky, nearly 70 percent in AY 2015, are funded by state grant aid. The percentages 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 public universities in Kentucky from AY 2000 to AY 2015. State grant aid was awarded to 60 percent to 70 percent of students in Kentucky over the period. In AY 2000, 66 percent of students received state grant aid; in AY 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 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.

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



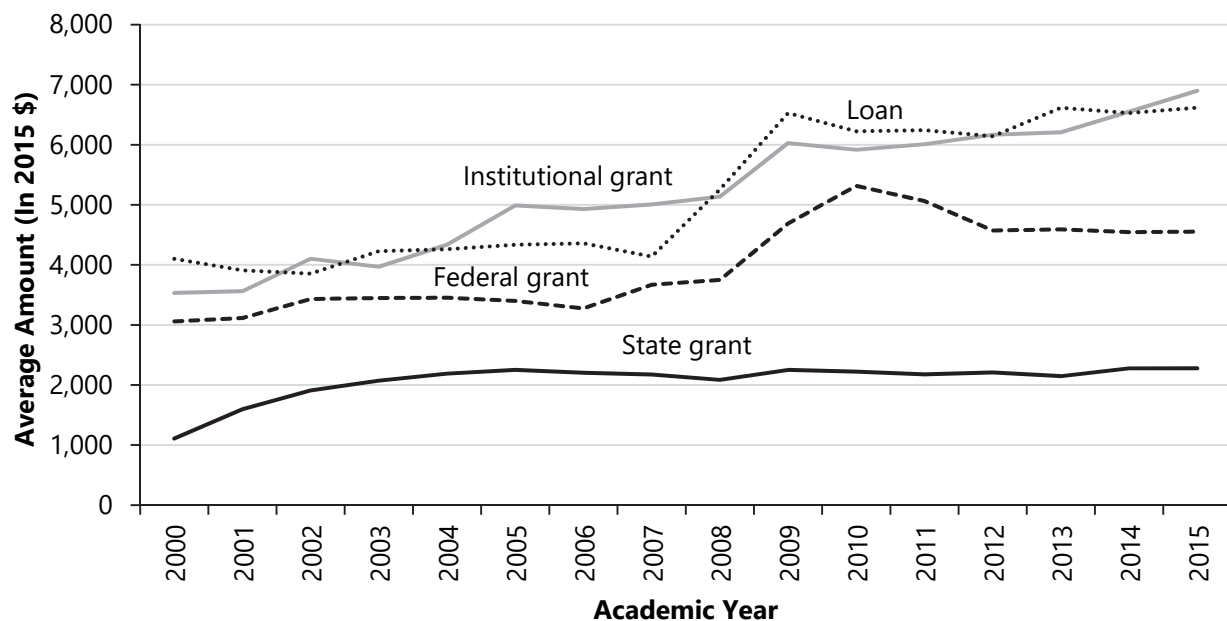
Note: Kentucky State University data are missing in academic years 2000 to 2003.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. 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.^c Figure 5.B shows the average amount of loans and federal, state, and institutional grant aid from AY 2000 to AY 2015. After AY 2003, state grant aid ranged from \$2,000 to \$2,300, and remained relatively flat over time. The average amounts 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 AY 2012, consistent with national trends. The average amounts of institutional grant aid and loan awards increased.

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



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

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

^c 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.

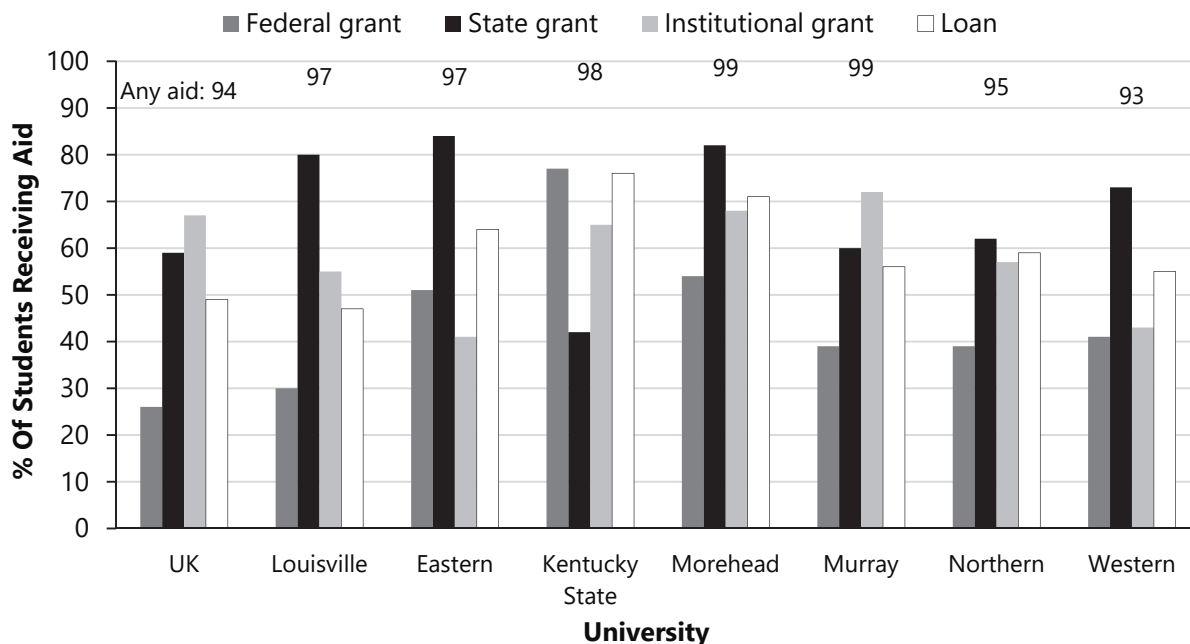
On average, at least 93 percent of students receive at least one type of financial aid at each university in Kentucky.

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 AY 2015. *Any aid* is the percentage of students who were awarded any type of aid, including 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, state grant aid was the category of aid awarded to the highest percentage of students at five Kentucky universities.

State grant aid awards funded more students at five universities: Eastern, Louisville, Morehead, Northern, 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 Kentucky Universities
Academic Year 2015

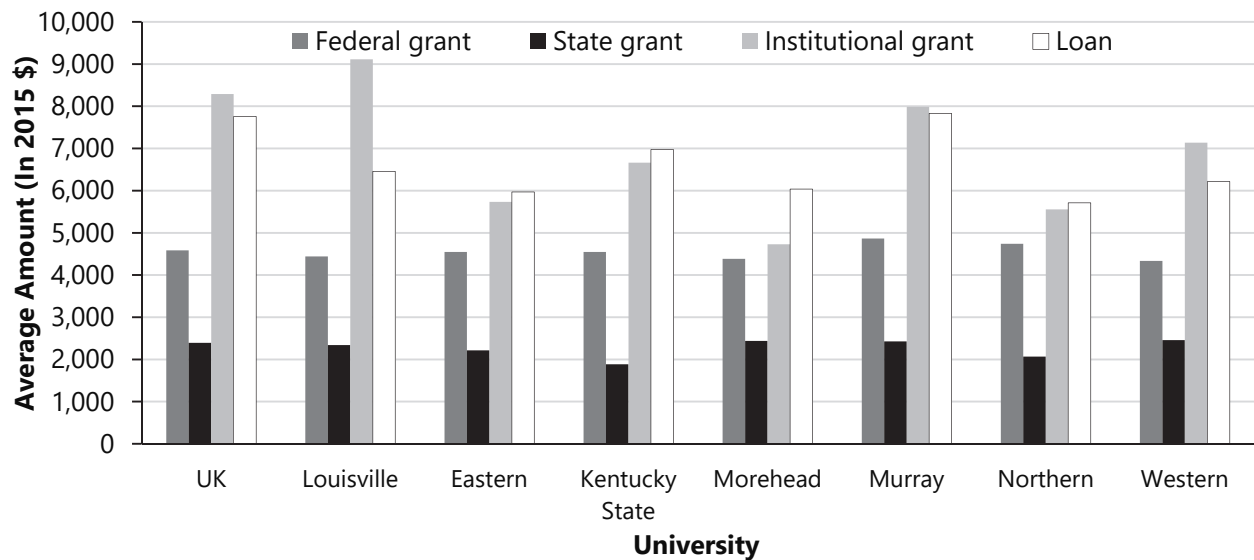


Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

In AY 2015, institutional grants provided the largest average amount of financial aid 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 AY 2015 at four universities (Louisville, Murray, UK, 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 AY 2015 and ranged from \$5,711 (Northern) to \$7,830 (Murray).

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

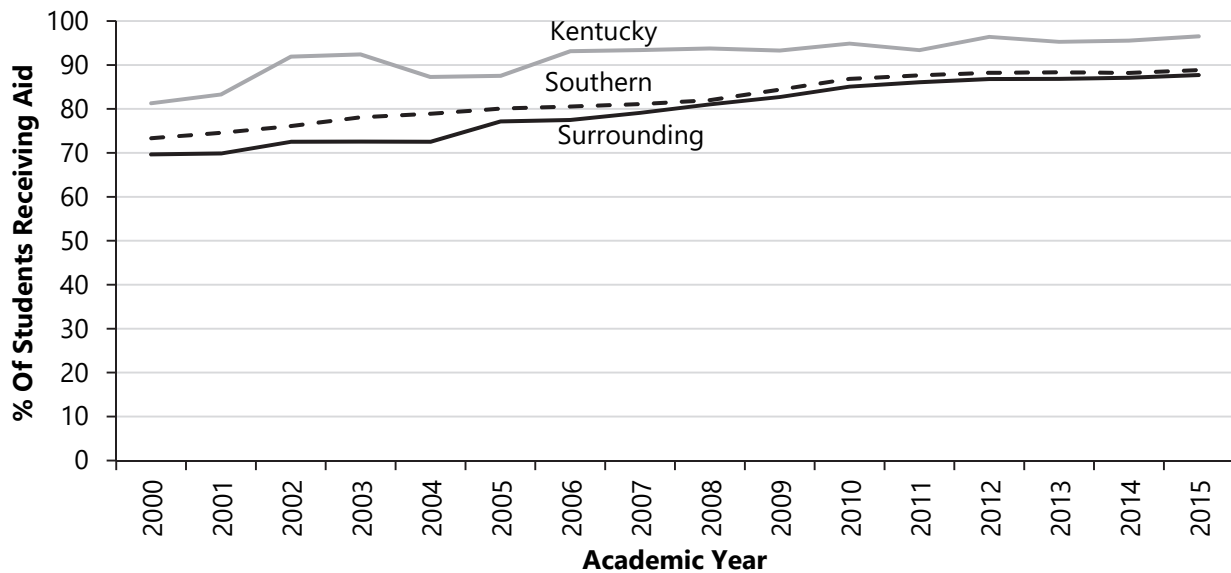


Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

The percentage of public university students receiving financial aid is higher in Kentucky than in surrounding and southern states.

Figure 5.E shows the total percentage of students receiving any type of financial aid at public 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 AY 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 Public 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.

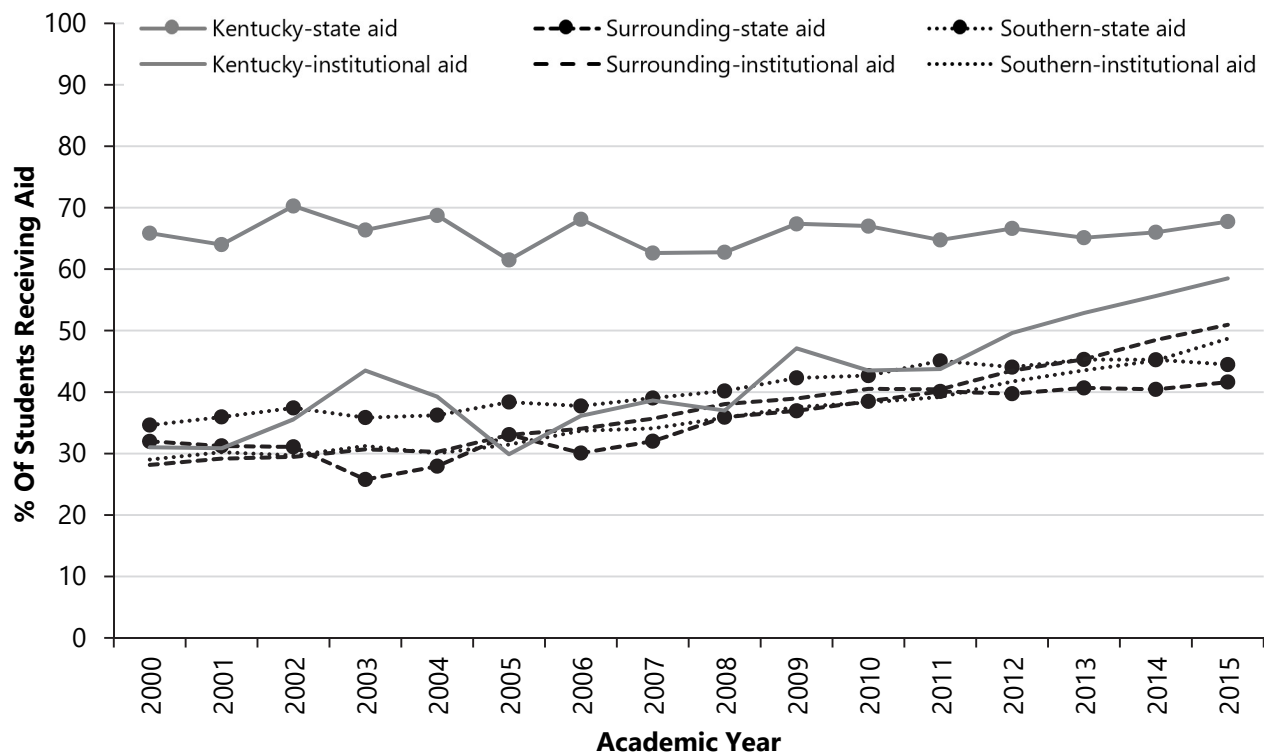
Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

State And Institutional Grant Aid

From 60 percent to 70 percent of students at public universities in Kentucky received state grant aid from AY 2000 to AY 2015, which was consistently higher than in surrounding and southern states. The percentage of university students receiving institutional grant aid since AY 2012 was higher in Kentucky than in surrounding and southern states. In AY 2015, 58.5 percent of students at Kentucky universities received institutional grant aid.

The percentage of students currently awarded state and institutional financial grant aid is higher in Kentucky than in surrounding and southern states. Figure 5.F shows the average percentage of public university 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 state grant aid to less than 50 percent of students during any given year. Institutional grant aid varied over time. Kentucky institutional grant aid increased, on average, with larger increases after AY 2001 and AY 2008 (overlapping two economic recessions). Kentucky universities awarded institutional grant aid to 31 percent of students in AY 2000 compared to 58.5 percent in AY 2015. In 2015, universities in surrounding and southern states awarded institutional grant aid to approximately one-half of students.

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



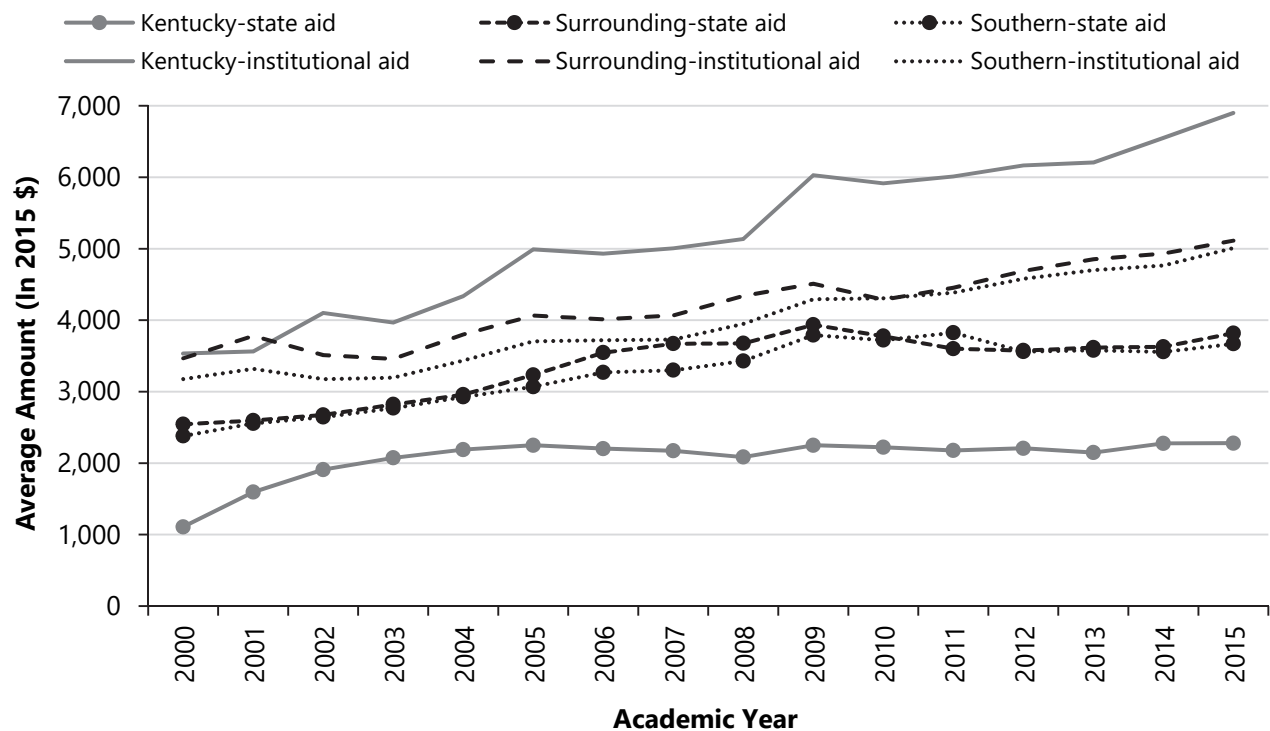
Note: Southern states have 245 universities; surrounding states have 84 universities. Kentucky State University data are missing in academic years 2000 to 2003.

Source: United States, Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

Compared to surrounding and southern states, Kentucky awards state grant aid to a larger percentage of students, but its average state grant aid awards are lower.

Figure 5.G shows the average amount of state and institutional grant aid awarded to students at public universities in Kentucky and in surrounding and southern states from AY 2000 to AY 2015. Kentucky has awarded state grant aid to a larger percentage of students, but the average amount of state grant aid has been lower than state grant aid awards at universities in surrounding and southern states. After AY 2003, the average state grant award to students in Kentucky was stable, but average state awards in surrounding and southern states increased. On average, increases in aid in southern schools went to need-based students from AY 2005 to AY 2015, but seven southern states, one surrounding state, and Kentucky decreased the proportion of total aid going to need-based students.^{d 49}

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



Note: Southern states have 245 universities; surrounding states have 84 universities. Kentucky State University data are missing in academic years 2000 to 2003.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

^d 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 AY 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 AY 2002. In AY 2000, universities in Kentucky awarded an average of \$3,533 in institutional grant aid, which was similar to averages in surrounding and southern states. In AY 2015, on average, universities in Kentucky awarded \$6,900 in institutional grant aid, which was almost \$1,800 more than the average in surrounding and southern states.

Since AY 2004, only one surrounding state provided state grant aid to a larger percentage of students than Kentucky.

Since AY 2004, Kentucky has provided state grant aid to a larger percentage of students, on average, than individual surrounding states except Tennessee. Table 5.3 shows the average percentage of public university students receiving grant aid during AY 2000 and AY 2015. In AY 2000, Kentucky awarded state grant aid to the highest percentage of students; Tennessee awarded it to the lowest. In AY 2004, Tennessee awarded state grant aid to the largest percentage of students. As of AY 2015, Tennessee continued to provide state grant aid to the highest percentage of students (77.1 percent); Ohio awarded it to the lowest (24.9 percent). The percentage of students receiving state grant aid in Ohio decreased from AY 2000 to AY 2015 by 27.7 percentage points. All other states increased aid over this period. Tennessee state grant aid had the largest increase, 64.5 percentage points.

Table 5.3
Average Percentage Of Students Receiving State Grant Aid At Public 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: Surrounding states have 84 universities.

*Kentucky State University data are missing in AY 2000.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. 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 public universities in Kentucky and surrounding states in AY 2000 and AY 2015. In AY 2000, Kentucky awarded the lowest average amount of state grant awards to students. In AY 2015, Kentucky offered the third lowest average award amount. The average amount of state grant aid awarded more than doubled during this period, among the largest state increases.^c

**Table 5.4
 Average Amount Of State Aid Grant Awarded To Students
 At Public 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: Surrounding states have 84 universities.

*Kentucky State University data are missing in AY 2000.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

In AY 2015, Kentucky ranked fourth highest among surrounding states in the percentage of students with institutional grant aid.

Table 5.5 shows the average percentage of public university students receiving an institutional grant in Kentucky and surrounding states in AY 2000 and AY 2015. In AY 2000, universities in Kentucky awarded institutional grant aid to an average of 31 percent of students. 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 AY 2000 to AY 2015. In AY 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).

^c State grant aid in Kentucky 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 5.5
Average Percentage Of Students Receiving Institutional Grant Aid At Public 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: Surrounding states have 84 universities.

*Kentucky State University data are missing in AY 2000.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

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

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

Table 5.6
Average Institutional Grant Aid Awarded To Students At Public 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: Surrounding states have 84 universities.

*Kentucky State University data are missing in AY 2000.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. 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 in AY 2000 and AY 2015. In AY 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 had a 38 percentage point increase in the percentage of students receiving state grant aid from AY 2000 to AY 2015, by far the largest increase, but it had the lowest share of students receiving state grant aid in AY 2000, 46 percent.

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

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

*AY 2000 data are missing.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. 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 at universities in Kentucky for AY 2000 and AY 2015. In AY 2015, average aid at six schools varied by \$239 or less, ranging from \$2,217 (Eastern) to \$2,456 (Western). In AY 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. Eastern students received an average of \$798 in state grant aid in AY 2000, the lowest among universities. The average amount increased to \$2,217 by AY 2015.

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

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

Note: Percentage changes may not equal changes in amounts shown because of rounding.

*AY 2000 data are missing.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. 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 shows 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 had the largest increase in the percentage of students receiving institutional grant aid. In AY 2000, only 7 percent of students at Eastern received institutional grant aid. By AY 2015, 41 percent of Eastern students received institutional grant aid. In AY 2015, the percentage of students receiving institutional grant aid ranged from 41 (Eastern) and 43 (Western) to 65 or more at four schools (Kentucky State, Morehead, Murray, and UK).

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

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

*AY 2000 data are missing.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

Average institutional grant aid increased at all Kentucky universities 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 increased the most at Eastern, more than 400 percent. UK had the smallest increase, 51.7 percent. In AY 2015, average institutional awards varied significantly; the highest average of more than \$9,000 (Louisville) was nearly twice as much as the lowest, \$4,730 (Morehead).

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

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

Note: Percentage changes may not equal changes in amounts shown because of rounding.

*AY 2000 data are missing.

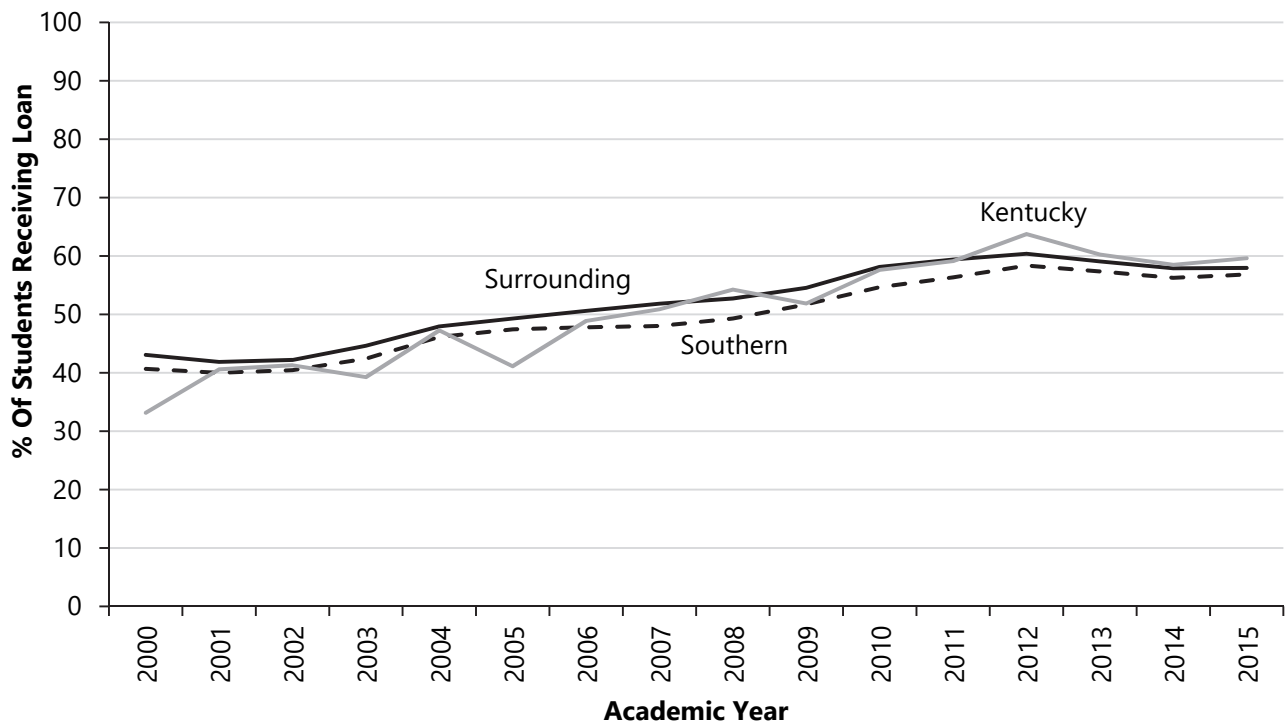
Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

Student Loans

Universities in Kentucky, surrounding, and southern states have similar percentages of students receiving student loans. Percentages 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 shows the average percentage of students receiving a loan award at public universities in Kentucky, surrounding, and southern states from AY 2000 to AY 2015. The percentage of students awarded a loan generally increased until AY 2012 but has remained relatively flat or decreased since. For Kentucky, the percentage of students receiving loans increased from approximately 47 percent to almost 60 percent from AY 2004 to AY 2015. Southern and surrounding states had similar increases.

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



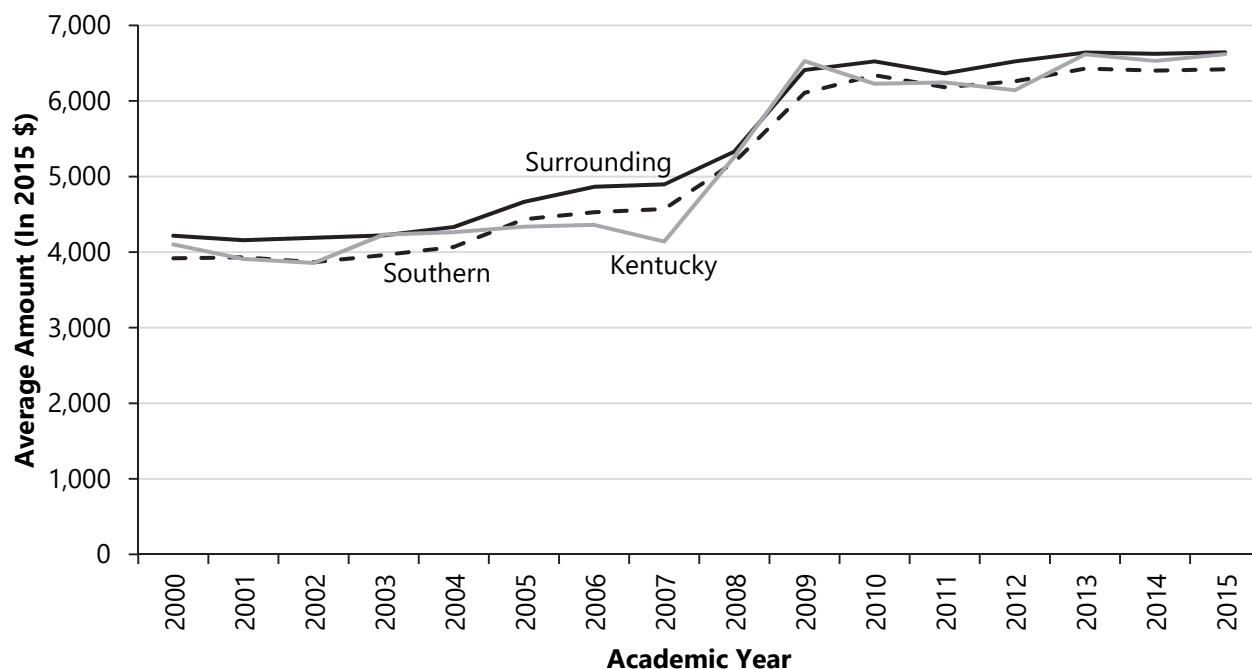
Note: Kentucky State University data are missing in academic years 2000 to 2003.

Source: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

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

Figure 5.I shows that the average amount of student loan awarded to students increased at public universities in Kentucky, surrounding, and southern states from AY 2000 to AY 2015. The largest increase occurred from AY 2007 to AY 2009, during an economic recession. Since AY 2009, the average amounts 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 Public 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: United States. Natl. Center for Educ. Statistics. Integrated Postsecondary Educ. Data System. Student Financial Aid Survey.

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. Trends in student loan debt are then covered: national trends in the second section, Kentucky trends in the third. The fourth section discusses two measures of student loan default: 2-year and 3-year cohort default rates. The fifth section discusses student loan repayment rates, another measure of student loan repayment.

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.⁵⁰ Table 6.1 shows current federal and Kentucky programs available for undergraduate students. Typically, students apply first for federal loans and then for other loan programs if needed. The two federal loan programs for undergraduates are the Federal Direct Loan and the Federal Perkins Loan.⁵¹ Both programs require that students complete the Free Application for Federal Student Aid, but the programs 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 Kentucky’s only state-based, private loan.

**Table 6.1
 Student Loan Programs**

Source	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 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 Educ. Assistance Authority.

Student Loan Debt

Student loan debt is the total accumulated loan balance. Nationally, student loan debt increased 70 percent from 2004 to 2012, a steeper rate of increase than that seen for 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.⁵² 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 2012.⁵³ Students' lack of information or lack of financial literacy may also affect the amount of debt incurred.⁵⁴

Nationwide. Nationally, the amount of student debt and the number of students borrowing increased by 70 percent from 2004 to 2012.⁵⁵ 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, a rate higher than that seen for increases during the two previous 5-year periods. In AY 2015, undergraduate borrowers who graduated had an average debt of \$26,800.^{a 56}

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.⁵⁷ They assert that a student's potential for earnings after college should determine whether student loan debt is too high.⁵⁸ Some researchers are concerned that the workforce's skill set remains stable while student loan debt increases and that student loan debt contributes to the decline in homeownership rates among adults aged 28 to 35.⁵⁹

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

Kentucky. In AY 2014, an average of 32.5 percent of a student's annual family income was needed to attend UK or Louisville.⁶⁰ 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 graduates have less post-graduation debt in Kentucky than in the majority of states.⁶¹ Three years after graduation, students have an average debt service-to-income ratio of 11.7 percent, but the ratio varies by major.⁶² Science, technology, engineering, and math (STEM) majors report an average debt service-to-income ratio of 7 percent. Ratios among social and behavioral sciences majors and arts and

^a The average amount includes only debt accumulated while at the university from which the student graduated.

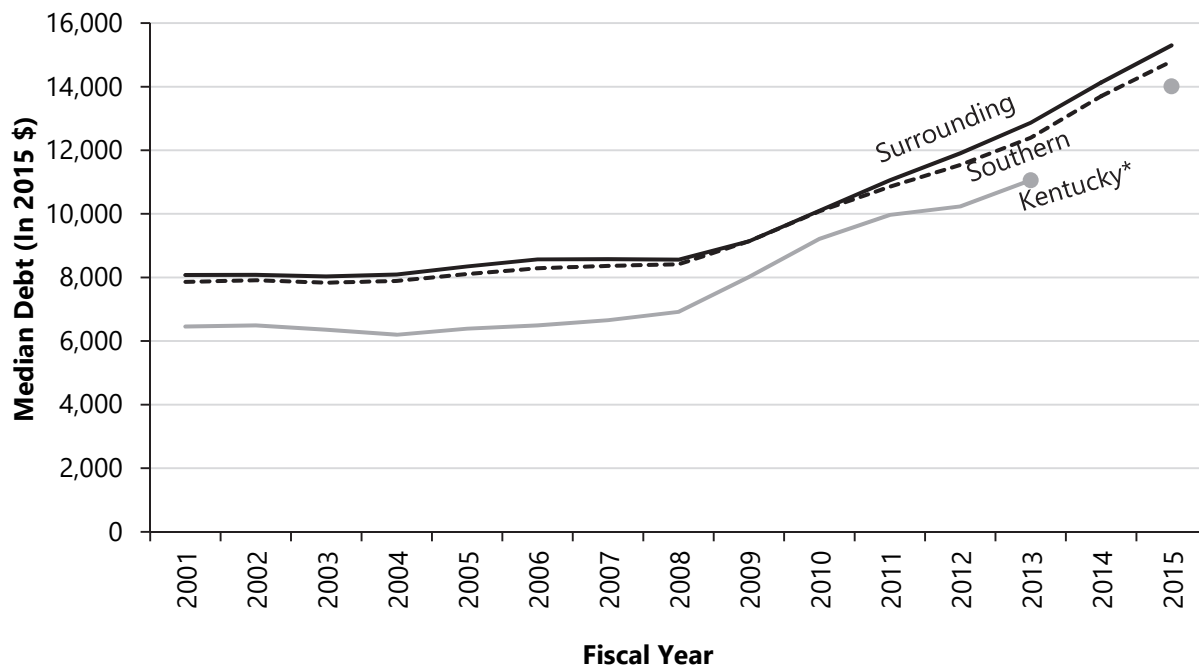
humanities majors range from 14.9 percent to 16.8 percent.⁶³ Baum and Schwartz (2006) suggest that the payment-to-income percentage should be less than 18 percent to 20 percent, but researchers recommend approximately 10 percent of pre-tax earnings to student loan repayment.⁶⁴ Woo and Soldner (2013) recommend that the payment-to-income share remain under 12 percent.⁶⁵

CPE provided College Scorecard data.⁶⁶ College Scorecard, published by the US Department of Education, includes 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. Exceptions are completion rates, which are calculated using data on first-time, full-time undergraduates. LRC staff adjusted all dollar figures to 2015 dollars.

Kentucky public university 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.^b 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 public universities in Kentucky and surrounding and southern states from FY 2001 to FY 2015.^c 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, which increased by 7 percent to \$6,918 by FY 2008, and then more than doubled to \$14,012 by FY 2015.

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



Note: Averages are for 83 universities in surrounding states and 246 universities in southern states.

*Kentucky universities did not report data for FY 2014.

Source: United States. Dept. of Educ. Natl. Student Loan Data System for Students.

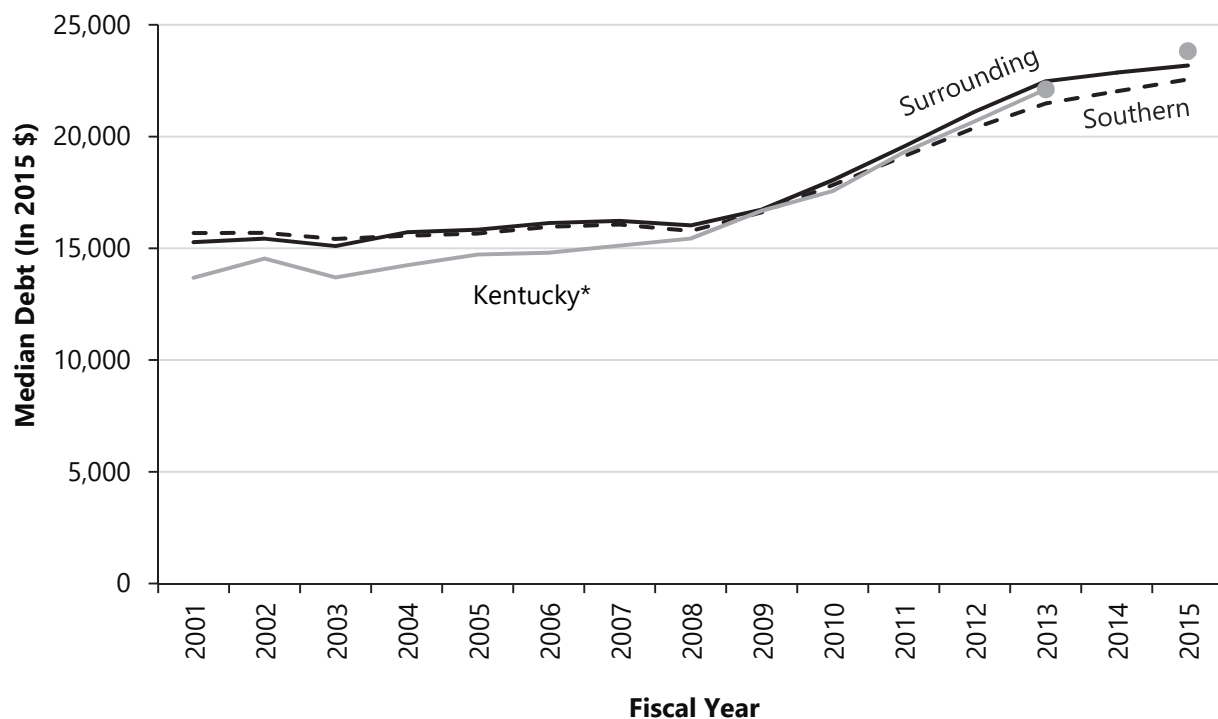
^b Repayment occurs when a student graduates or withdraws from the university.

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

College graduates in Kentucky and surrounding and southern states 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 and surrounding and southern states have similar average median debt levels. Figure 6.B shows the median debt for students who graduated from public 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 states, 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; 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. 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 Public Universities
In Kentucky, Surrounding States, And Southern States (In 2015 Dollars)
FY 2001 To FY 2015



Note: Averages are for 83 universities in surrounding states. Several southern universities have missing values for median debt; the number of Southern universities ranges from 214 to 246 per year.

*Kentucky universities did not report data for FY 2014.

Source: United States. Dept. of Educ. Natl. 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 more than doubled since FY 2001, the second largest increase.

Table 6.2 lists the average median debt for students from public universities in Kentucky and surrounding states for fiscal years 2001 and 2015. In FY 2001, Kentucky's students had the third lowest average median debt level, which was 5 percent higher than the lowest average among surrounding states (Indiana). By FY 2015, Kentucky's students had the fourth lowest, which was 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 Public
Universities In Kentucky And Surrounding States
(In 2015 Dollars)
FY 2001 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: Averages are for 84 universities in surrounding states.

Source United States. Dept. of Educ. Natl. 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 shows the median debt of students from universities in Kentucky who entered repayment in FY 2001 compared to that of 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 Kentucky Universities
(In 2015 Dollars)
FY 2001 And FY 2015

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

Source: United States. Dept. of Educ. Natl. Student Loan Data System for Students.

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

Table 6.4 shows median debt of college graduates at Kentucky universities who graduated in FY 2001 compared to that of 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 Kentucky Universities
(In 2015 Dollars)
FY 2001 And FY 2015

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

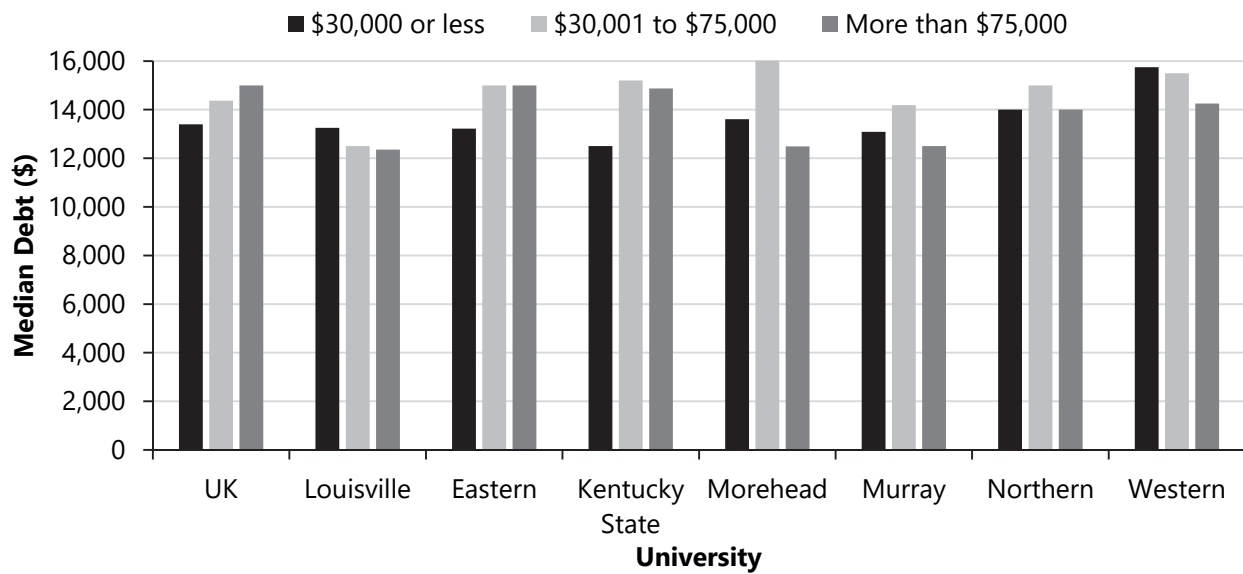
*No data reported for FY 2001.

Source: United States. Dept. of Educ. Natl. 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 shows 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 approximately \$12,000 to \$16,000 for students from all family income groups.

Figure 6.C
Median Debt Of Students At Kentucky Universities By Family Income
FY 2015



Source: United States. Dept. of Educ. Natl. Student Loan Data System for Students.

Default Rates

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

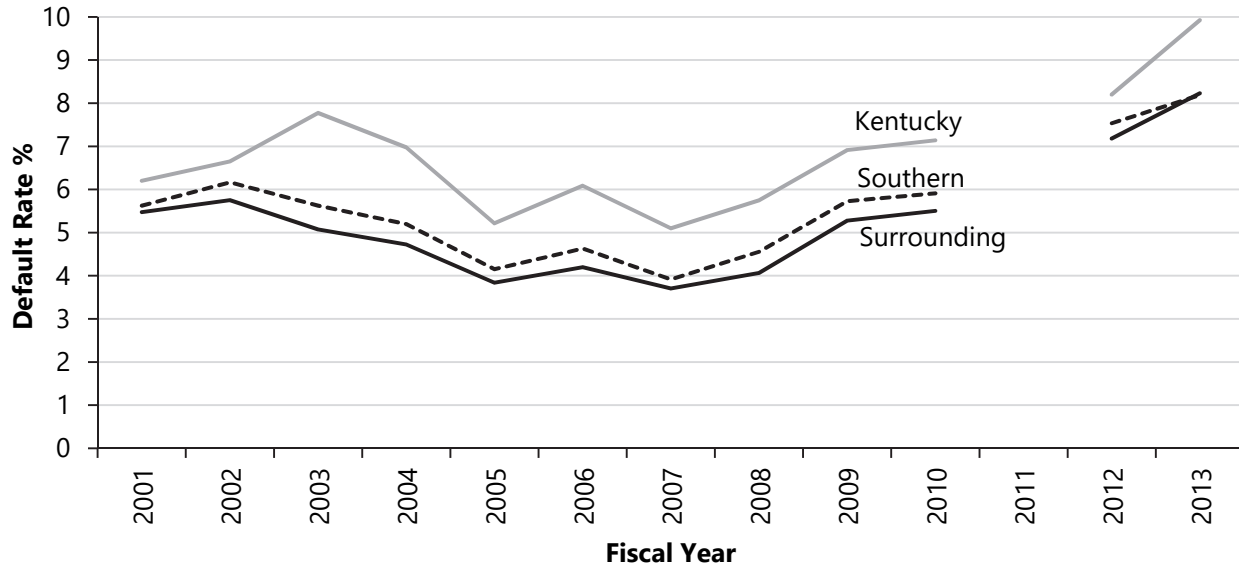
Default rates measure the percentage of students who do not make progress in repaying loans. Research is mixed on how the amount of student debt affects the likelihood of defaulting on a student loan. Some studies find that high levels of debt increase risk of default; others find that low levels of debt increase risk of default.⁶⁷ Other research indicates 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.⁶⁸ 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 STEM majors, students with higher family incomes, and students who graduated.⁶⁹ Nationally, default rates for public institutions have been declining since FY 2010.⁷⁰

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 after 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.^d

Figure 6.D shows the changes in the average 2-year cohort default rates from FY 2001 to FY 2013. The 2-year cohort default measure was discontinued after FY 2013. Kentucky public university 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. 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).

^d 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.

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



Note: Averages are for 83 universities in surrounding states and 256 universities in southern states. No data were reported for FY 2011.

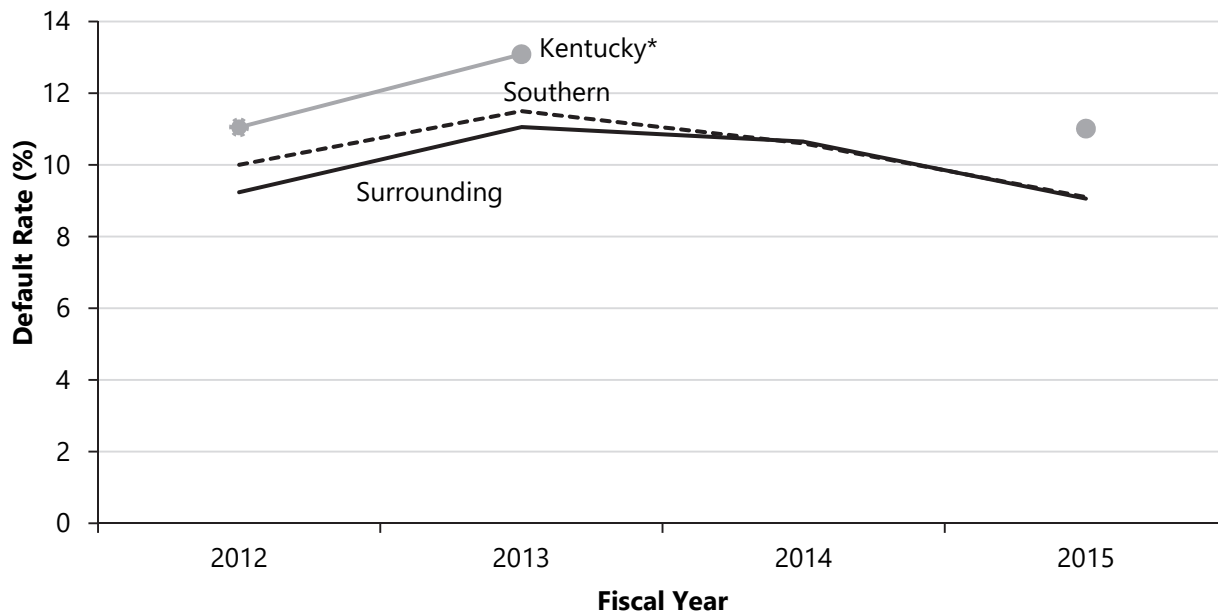
Source: United States. Dept. of Educ. Office of Federal Student Aid.

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 2 fiscal years.^e Figure 6.E shows the average 3-year rates for students from public universities in Kentucky, surrounding states, 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.

^e 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.

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



Note: Averages are for 83 universities in surrounding states and 256 universities in southern states.
 * Kentucky universities did not report data for FY 2014.
 Source: United States. Dept. of Educ. Office of Federal Student Aid.

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

Table 6.5 shows 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, whose rate remained the same. Murray had the largest increase in the rate, 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 in FY 2013 was more than twice as high as that of other schools.

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

University	FY 2001	FY 2013	% Point Increase
UK	3.6%	6.1%	2.5
Louisville	4.5	8.2	3.7
Eastern	4.9	9.1	4.2
Ky. State	11.6	21.8	10.2
Morehead	10.0	10.0	0.0
Murray	3.0	7.3	4.3
Northern	5.0	6.8	1.8
Western	7.0	10.1	3.1

Source: United States. Dept. of Educ. 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 shows the 3-year cohort default rate of students from Kentucky's universities for FY 2012 and FY 2015. The rate decreased 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 the rate for other schools. UK had the lowest at 5.5 percent.

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

University	FY 2012	FY 2015	% Point Change
UK	4.3%	5.5%	1.2
Louisville	7.7	7.4	-0.3
Eastern	12.3	11.7	-0.6
Ky. 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
Western	12.1	11.9	-0.2

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

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.

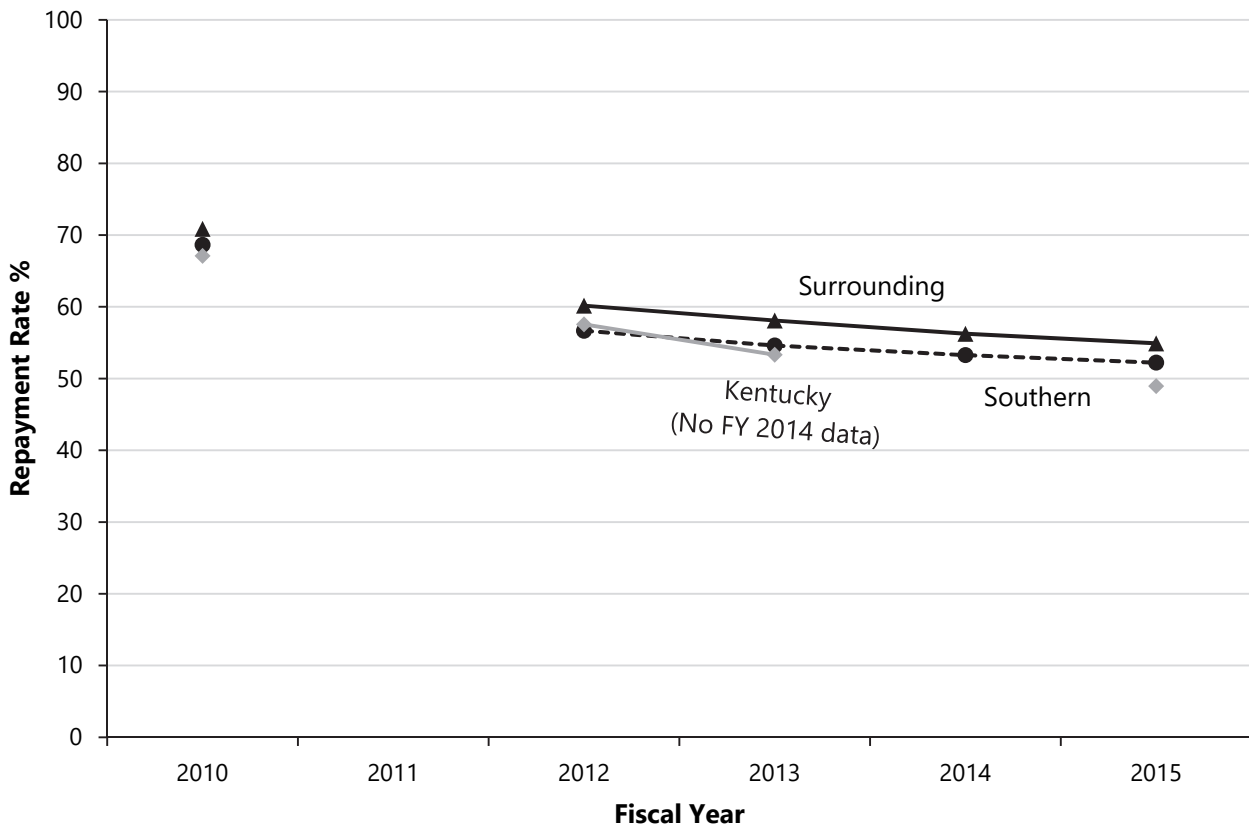
Repayment rate is another measure used to assess student progress in repaying loans. The US Department of Education defines the term as the fraction of a repayment cohort that is not in default and has paid at least \$1 on the original loan balance since entering repayment. Repayment rates capture students who enter deferments or forbearances and students who either temporarily stop or reduce payments, which are not captured by default rates.⁷¹ The 3-year cohort repayment rate has been used since FY 2010. 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.^f

^f For example, the 3-year repayment rate for FY 2013 includes students who entered repayment in FY 2013 and had a declining student loan balance by the end of FY 2015.

Repayment rates for students from universities in Kentucky, surrounding states, 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 public universities in Kentucky, surrounding states, and southern states from FY 2010 to FY 2015. The differences among the groups of states vary by year. Kentucky’s students had an average repayment rate of 49 percent in FY 2015. This was lower than the average rates in surrounding states (55 percent) and southern states (53 percent). Average repayment rates of Kentucky students are lower than those of students in surrounding states for all years and lower than those of students in 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 2010 To FY 2015



Note: All data are missing for FY 2011; data for Kentucky universities are missing for FY 2014. Surrounding includes 83 universities; southern includes 248 universities.

Source: United States. Dept. of Educ. Natl. Student Loan Data System for Students.

Kentucky's average 3-year cohort repayment rate is lower than that of 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 public universities in Kentucky and surrounding states. Kentucky's average 3-year cohort repayment rate is lower than that of most surrounding states. In FY 2010, Kentucky's average rate was 67.1 percent. The highest average rate was 81 percent (Virginia); the lowest was 62.3 percent (West Virginia). Rates for all states decreased over time. 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 Public Universities In Kentucky And Surrounding States
FY 2010 And FY 2015

State	FY 2010	FY 2015	% Point Change
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

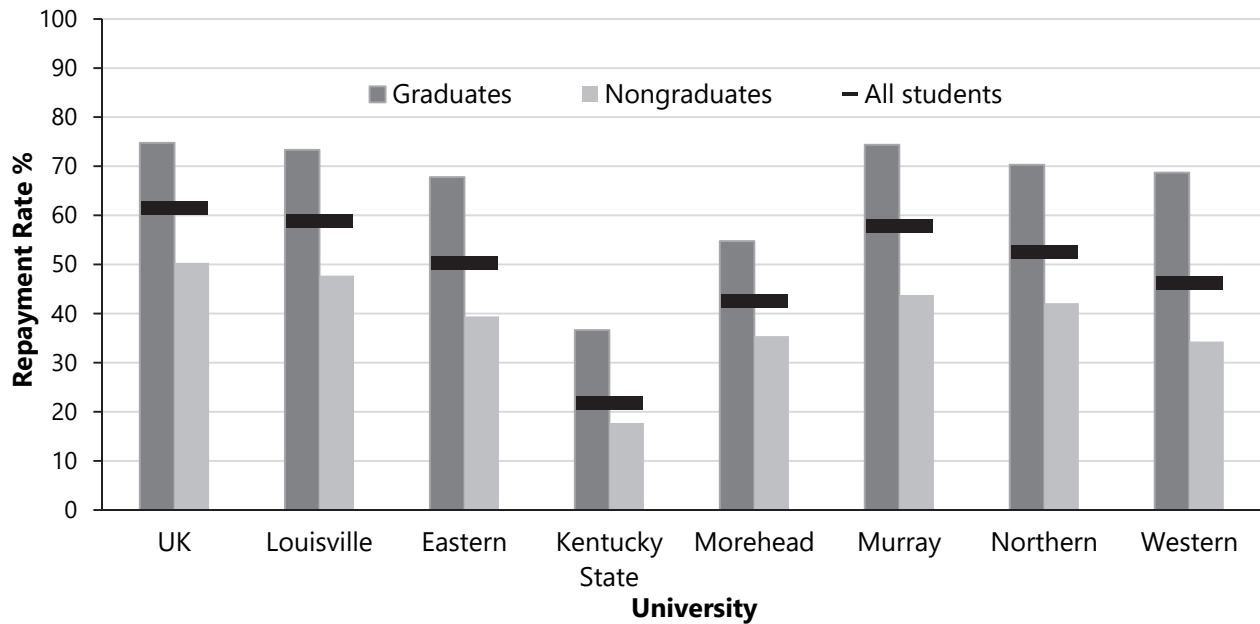
Note: Averages are for 83 universities in surrounding states.

Source: United States. Dept. of Educ. Natl. 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 those who did not graduate range from 17.7 percent (Kentucky State) to 50.3 percent (UK).

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

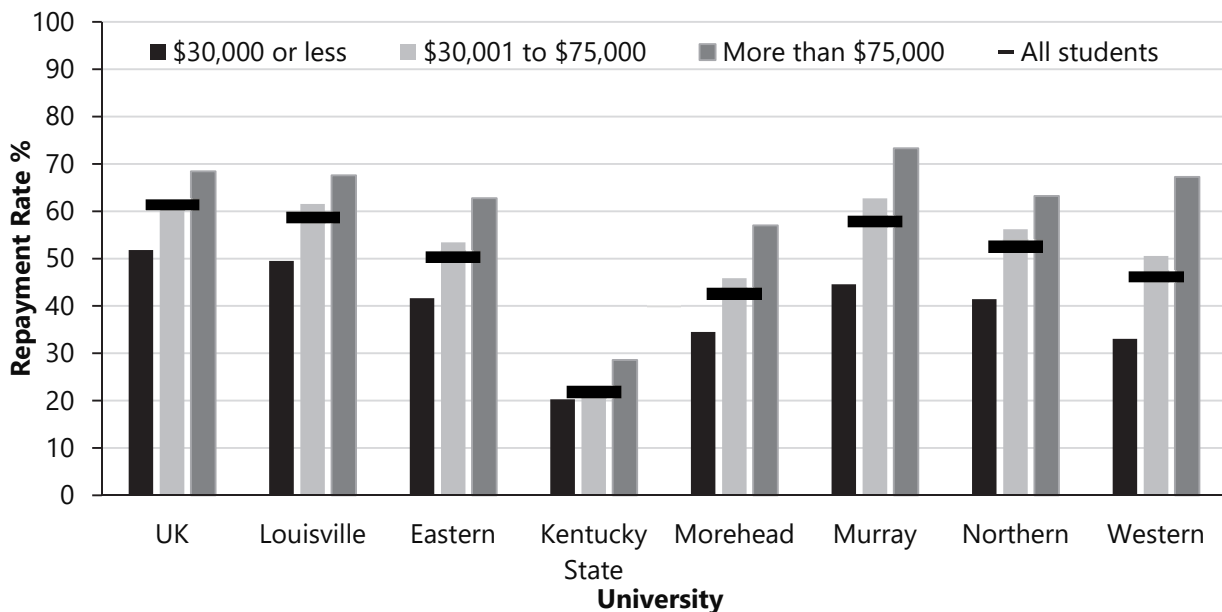


Source: United States. Dept. of Educ. Natl. Student Loan Data System for Students.

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. There is no clear pattern in median debt by family income (Figure 6.C), but repayment rates by family incomes show the same pattern across all eight universities. Students from the highest-income families have the highest rates, and students from the lowest-income families have the lowest rates for all universities. The rates at all family income levels are lowest 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-income families 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 From Kentucky Universities By Income
FY 2015



Source: United States. Dept. of Educ. Natl. Student Loan Data System For Students.

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 reports data by academic year on tuition, fees, total cost of attendance, and other student expenses. Total costs of attendance are calculated as follows.

- 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 reports data by academic year on students receiving financial aid by type, amount awarded, and net price. Net price (total cost of admission – average amount of grant and scholarship aid) became available in 2009. Net price is calculated as follows.

- 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 = $[(\text{on-campus room, board, and other expenses} \times \text{number of on-campus students}) + (\text{on-campus room, board, and other expenses} \times \text{number of on-campus students}) + (\text{off-campus room with family, board, and other expenses} \times \text{number of off-campus students living with family}) + (\text{off-campus room not with family, board, and other expenses} \times \text{number of off-campus students not living with family})] \div \text{total number of students}$

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 financial reporting standards, except for the University of Delaware, which uses Financial Accounting Standards Board standards.

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, or member states of the Southern Regional Education Board. Staff excluded universities specializing in medical or health degree programs and universities that did not report data for 2 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 A&M-Texarkana,

University of Houston-Clearlake, University of Houston-Victoria, Governors State University, Athens State University, Lamar University, Southern University at New Orleans, and New College of Florida.

IPEDS allows university staff to update some variables' information from previous years when submitting new surveys. For example, the AY 2015 survey allowed staff to enter room and board costs for AY 2015 and update costs from academic years 2012, 2013, and 2014. For this report, 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 variables 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	Academic Year Of Initial Data	Academic Year Of Last Update
2015	2015	2007	2010
2014	2015	2006	2009
2013	2015	2005	2007
2012	2015	2004	2006
2011	2014	2003	2005
2010	2013	2002	2004
2009	2012	2001	2003
2008	2011	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 AY 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 4 decimal points.

Table 2
Index Factors To Adjust For Inflation

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

Source: United. States. Bureau of Labor Statistics.

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