

Innovative State Tools for Enhancing College Affordability

- Dr. Beth Kelly, Research Director, Kentucky Center for Statistics (KYSTATS)
- Dr. Chris Ledford, Associate Director of Data and Advanced Analytics, Council on Postsecondary Education
- Lee Nimocks, Vice President and Chief of Staff, Council on Postsecondary Education

Kentucky Center for Statistics

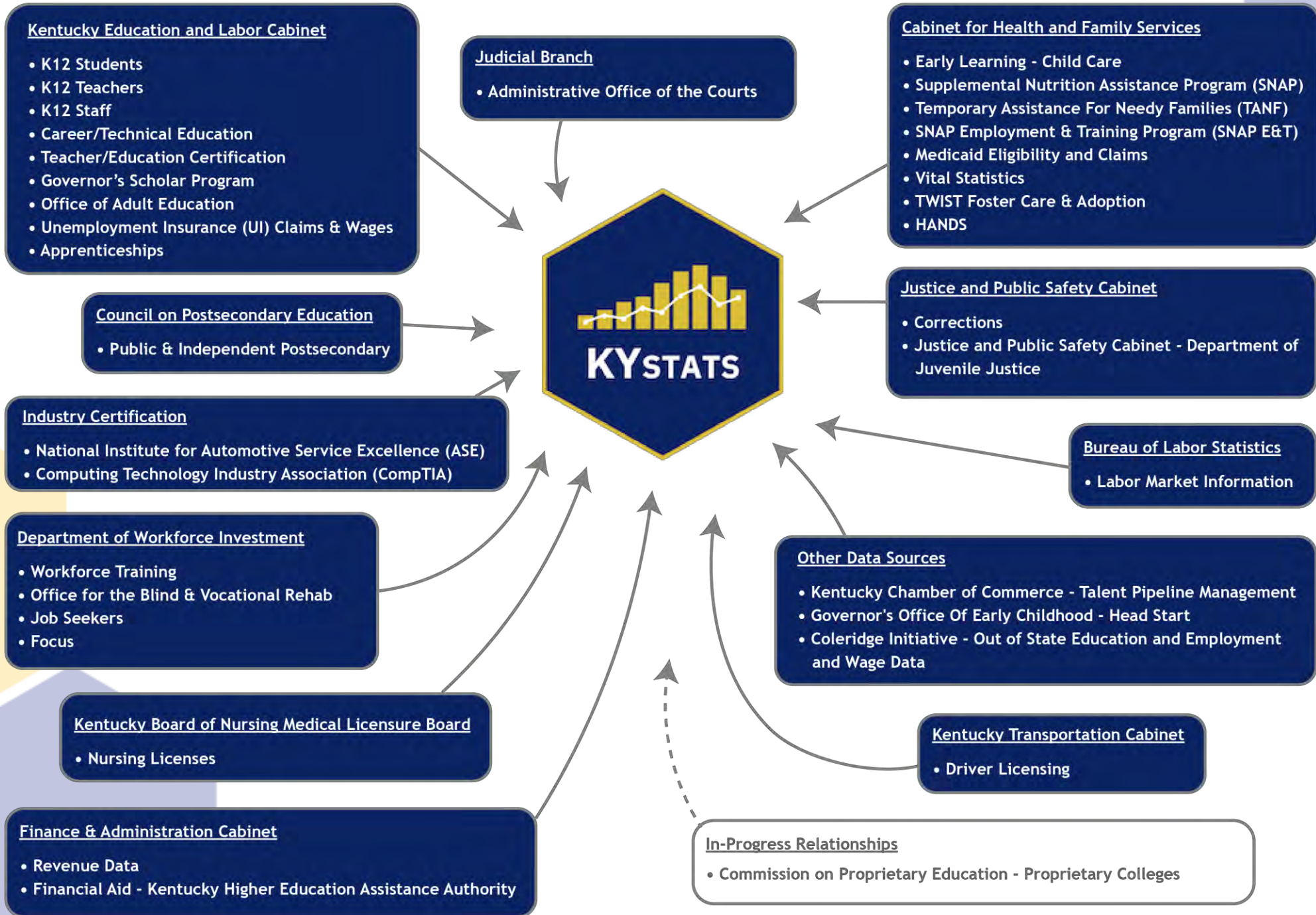


Uniting our data.
Informing our Commonwealth.

HB 419 Legislation

In order to help prospective students make more informed decisions about their futures and ensure that they are adequately aware of the cost of college and other career paths, the Council on Postsecondary Education shall compile on an annual basis the following information:

- (a) The most **in-demand jobs** in the state along with the starting **salary**, the median salary, and the typical **education level** for those jobs;
- (b) For the University of Kentucky, the University of Louisville, each comprehensive university, and each college within the Kentucky Community and Technical College System:
 1. The average **cost**;
 2. The average three (3) year student **loan default rate**;
 3. The average student **loan debt** for students who have attended the institution;
 4. The **percentage of students taking out student loans**;
 5. The average **graduation rate and average time to completion**;
 6. The number of students completing high school credential programs and **career and technical education programs**, and, as available, the number of students completing **apprenticeship programs**; and
 7. The median and range of **starting salaries** for graduates; and
- (c) For each college within the Kentucky Community and Technical College System, the percentage of **students employed by program area** and, as data becomes available, the rate of students gainfully employed in the recognized occupation for which the student was trained or in a related comparable recognized occupation.



Kentucky Longitudinal Data System

Labor Market Demand

Labor Force Participation

Employment Rates

Unemployment Insurance Payments & Claims

Out-of-State Employment Data

Workforce Training Programs

Out-of-State K-12 & Postsecondary Data

GED Completions & Adult Education

Kentucky's Workforce

K-12: Career & Technical Education Pathway Completions

High School Graduation Rates

College & Career Readiness from High School

Financial Aid Data

Postsecondary Enrollment

Postsecondary Completion

Registered Apprenticeships

Cost of College Attendance





Kentucky Students' Right to Know



This dashboard is powered by the Kentucky Center for Statistics. Those using screen readers may need to click the enter key to select options in filters. This dashboard is best viewed on a desktop computer. If you have any questions regarding accessibility, please contact kystats@ky.gov.

For reports on Pre-K, K-12, postsecondary, and more, follow us on social media @[kystats](https://twitter.com/kystats) or visit our website:

<https://kystats.ky.gov/>

An alternative, accessible format in Excel is available for download here:

https://bit.ly/PAF_SRTK

Technical documentation can be found in PDF form here:

https://bit.ly/TechNotes_SRTK

The current dashboard has been designed to link college majors to the most in-demand jobs in the state along with typical education requirements, wages, and institutions offering these majors. Filters will change the dashboard to reflect outcomes for chosen majors of interest. Users can also see financial aid and graduate outcomes for selected majors at various postsecondary institutions, helping prospective students make more informed decisions about their future and ensuring that they are adequately aware of the cost of college. Additional Pathways information is also provided.

Do you want to filter by most popular majors or all majors?

Top 60 Most Popular Majors ▼

*Institutions may have different naming conventions for similar majors.

Select a specific major of interest to filter the dashboard.

Accounting ▼

Top Occupations by Average Annual Openings for the Selected Major

Occupation	Typical Education Required for Entry Level	Projected Annual Openings	Early Career Salary	Mid-Career Salary	Late Career Salary
------------	--	---------------------------	---------------------	-------------------	--------------------

Students' Right To Know



<https://kystats.ky.gov/Latest/KYStudentRightToKnow>

Students' Right To Know



Kentucky Students' Right to Know



This dashboard is powered by the Kentucky Center for Statistics. Those using screen readers may need to click the enter key to select options in filters. This dashboard is best viewed on a desktop computer. If you have any questions regarding accessibility, please contact kystats@ky.gov.

Explore College and Career Opportunities

This tool is intended to help prospective students make more informed decisions about their futures and ensure that they are adequately aware of career paths and the cost of college. The tool uses historical data to provide students with insights into their potential postsecondary and workforce outcomes. Explore the data using the tabs below.

Exploring Careers



Select an occupation to explore corresponding career information and majors that align with your interests.

Best for: Students looking to make informed decisions about which academic path to pursue based on their desired profession.

Major Selection



Choose a major of interest to see the associated occupations.

Best for: Students interested in specific majors and their potential career paths.

College Comparison



Search for Kentucky public 2-year and 4-year colleges and universities based on your interests and compare their financial aid options.

Best for: Students prioritizing school selection and the associated financial aid costs.

CTE Outcomes



View information on Kentucky Career and Technical Education (CTE) programs and Apprenticeships.

Best for: Students interested in how high school programs can prepare them for postsecondary and workforce opportunities.

Postsecondary Experience



Explore detailed information about loans and employment outcomes for specific majors at each public Kentucky institution.

Best for: Students seeking a complete understanding of how much previous students have paid for a similar education and their expected employment outcomes.

Additional Resources

For an in-depth exploration of Kentucky occupations and a career assessment tool visit the **Career Explorer**: <https://kystats.ky.gov/CareerExplorer>

Exploring Careers



Kentucky Students' Right to Know



Exploring Careers

Begin by selecting an occupation of interest. The results will provide details about the occupation, recommend relevant majors, and offer insights into the likelihood of finding employment and expected wages upon completion.



[Return to Landing Page](#)

Filter Occupation Dropdown by Grouping

Arts, Design, Entertainment, Sports, and Media

Select an Occupation to Filter Results

Graphic Designers

Information on Selected Occupation

Graphic Designers



Typical Education Required for Entry Level
Bachelor's degree



Projected Annual Openings
246



Typical Salary
\$49,130



Projected Job Growth
+2.7%

Exploring Careers: Related Majors

Results for Related College Majors

The following majors could be pursued by individuals aiming to find a job in the selected occupation. See employment outcomes for individuals who completed their programs in 2020 and their employment and wage data in Kentucky three years later.

Digital Arts

	Total Graduates	Years to Degree	Employment After 3 Years in Kentucky	Median Annual Earnings
Bachelor	49	3.8	45%	\$34,640

Graphic Design

	Total Graduates	Years to Degree	Employment After 3 Years in Kentucky	Median Annual Earnings
Associate	*	*	*	*
Certificate/Diploma	40		42%	\$37,950

Design and Visual Communications, General

	Total Graduates	Years to Degree	Employment After 3 Years in Kentucky	Median Annual Earnings
Bachelor	13		*	*

Web Page, Digital/Multimedia and Information Resources Design

	Total Graduates	Years to Degree	Employment After 3 Years in Kentucky	Median Annual Earnings
Associate	*	*	*	*
Certificate/Diploma	12		*	*



Kentucky Students' Right to Know



This dashboard is powered by the Kentucky Center for Statistics. Those using screen readers may need to click the enter key to select options in filters. This dashboard is best viewed on a desktop computer. If you have any questions regarding accessibility, please contact kystats@ky.gov.

Explore College and Career Opportunities

This tool is intended to help prospective students make more informed decisions about their futures and ensure that they are adequately aware of career paths and the cost of college. The tool uses historical data to provide students with insights into their potential postsecondary and workforce outcomes. Explore the data using the tabs below.

Exploring Careers

Select an occupation to explore corresponding career information and majors that align with your interests.

Best for: Students looking to make informed decisions about which academic path to pursue based on their desired profession.

Major Selection

Choose a major of interest to see the associated occupations.

Best for: Students interested in specific majors and their potential career paths.

College Comparison

Search for Kentucky public 2-year and 4-year colleges and universities based on your interests and compare their financial aid options.

Best for: Students prioritizing school selection and the associated financial aid costs.

CTE Outcomes

View information on Kentucky Career and Technical Education (CTE) programs and Apprenticeships.

Best for: Students interested in how high school programs can prepare them for postsecondary and workforce opportunities.

Postsecondary Experience

Explore detailed information about loans and employment outcomes for specific majors at each public Kentucky institution.

Best for: Students seeking a complete understanding of how much previous students have paid for a similar education and their expected employment outcomes.

Major Selection



Kentucky Students' Right to Know



Major Selection

Choose an academic area and specific major of interest. The results will offer information on postsecondary and employment outcomes for that major, and suggest related occupations where students may find employment after graduation.

[← Return to Landing Page](#)

Filter Major Dropdown by Academic Area

Mathematics And Statistics

Select a Postsecondary Major

Mathematics, General

Post-Graduation Outlook for Mathematics, General

Explore real-world data from 2020 Kentucky college graduates to gain insights into how various majors and degree levels influence student outcomes. The following section includes 2020 Kentucky graduates and their employment outcomes. Employment outcomes are measured three years after completion.

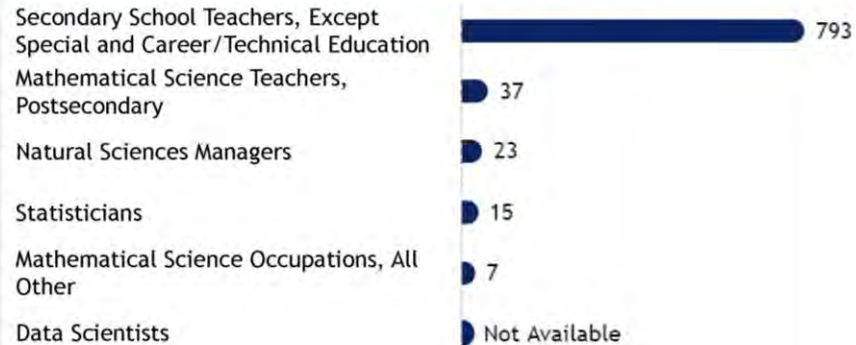
	Bachelor	Master	Doctoral
Total Graduates	155	30	11
Years to Degree	4.1		
Employment After 3 Years	53%	37%	*
Median Annual Earnings	\$43,166	\$52,660	*

Major Selection: Career Prospects

Search Results: Career Prospects for Mathematics, General

The following sections link the selected major to related jobs and their projected outcomes.

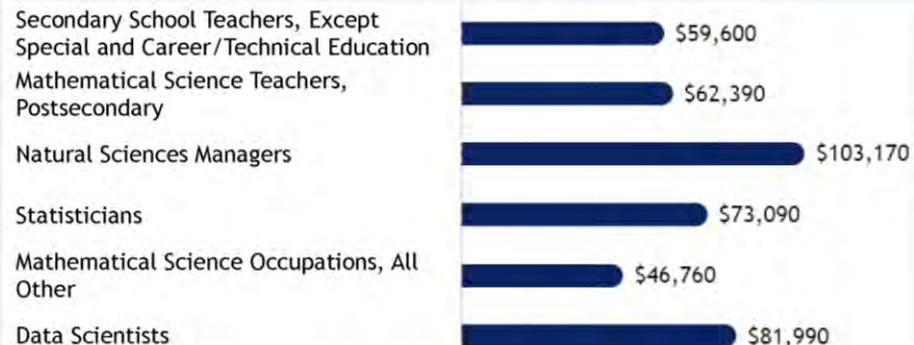
What Jobs Will Have the Most Openings Each Year?



What are the Fastest Growing Jobs?



What are the Typical Salaries for Related Jobs?



What is the Typical Education Required for Entry?

Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's degree
Mathematical Science Teachers, Postsecondary	Doctoral or professional degree
Natural Sciences Managers	Bachelor's degree
Statisticians	Master's degree
Mathematical Science Occupations, All Other	Bachelor's degree
Data Scientists	Bachelor's degree



Kentucky Students' Right to Know



This dashboard is powered by the Kentucky Center for Statistics. Those using screen readers may need to click the enter key to select options in filters. This dashboard is best viewed on a desktop computer. If you have any questions regarding accessibility, please contact kystats@ky.gov.

Explore College and Career Opportunities

This tool is intended to help prospective students make more informed decisions about their futures and ensure that they are adequately aware of career paths and the cost of college. The tool uses historical data to provide students with insights into their potential postsecondary and workforce outcomes. Explore the data using the tabs below.

Exploring Careers

Select an occupation to explore corresponding career information and majors that align with your interests.

Best for: Students looking to make informed decisions about which academic path to pursue based on their desired profession.

Major Selection

Choose a major of interest to see the associated occupations.

Best for: Students interested in specific majors and their potential career paths.

College Comparison

Search for Kentucky public 2-year and 4-year colleges and universities based on your interests and compare their financial aid options.

Best for: Students prioritizing school selection and the associated financial aid costs.

CTE Outcomes

View information on Kentucky Career and Technical Education (CTE) programs and Apprenticeships.


Best for: Students interested in how high school programs can prepare them for postsecondary and workforce opportunities.

Postsecondary Experience


Explore detailed information about loans and employment outcomes for specific majors at each public Kentucky institution.

Best for: Students seeking a complete understanding of how much previous students have paid for a similar education and their expected employment outcomes.

College Comparison



Kentucky Students' Right to Know



College Comparison

Use the filters to select two institutions for comparison. The results will provide insights into associated costs of postsecondary education and graduation outcomes for 2023. Loan default rates are for 2019.

[← Return to Landing Page](#)

Select an Institution:

Select a Second Institution:

Net Price

The average yearly price actually charged to first-time, full-time undergraduate students receiving student aid at an institution of higher education after deducting such aid.

KCTCS	\$5,567
Public Four-Year Institutions	\$12,985

Cost of Attendance

The amount of tuition and fees, room and board, books and supplies, and other expenses that a full-time, first-time degree/certificate-seeking in-state student can expect to pay to go to college for an academic year.

KCTCS	\$12,550
Public Four-Year Institutions	\$24,629

In-State Tuition

The amount of money charged for instructional services per semester to students with a Kentucky residence.

KCTCS	\$4,575
Public Four-Year Institutions	\$10,609

College Comparison

Select an Institution

Bluegrass Community & Technical College

Select a Second Institution

University of Kentucky

Net Price

The average yearly price actually charged to first-time, full-time undergraduate students receiving student aid at an institution of higher education after deducting such aid.



Cost of Attendance

The amount of tuition and fees, room and board, books and supplies, and other expenses that a full-time, first-time degree/certificate-seeking in-state student can expect to pay to go to college for an academic year.



In-State Tuition

The amount of money charged for instructional services per semester to students with a Kentucky residence.



Out-of-State Tuition

The amount of money charged for instructional services per semester to students without a Kentucky residence.



Grants and Scholarships

The average yearly amount of assistance received for covering the cost of postsecondary education that does not need to be paid back. Loans are not included in grants and scholarships.



Graduation Rate

The percent of first-time, full-time bachelor's degree-seeking students who graduate with a bachelor's degree within six years from entering an institution. The percent of first-time, full-time, associate or credential-seeking students who graduate with an associate degree or credential within three years from entering an institution.



Loan Default Rate

The percentage of a school's borrowers who enter repayment during a particular federal fiscal year, and default prior to the end of the second following fiscal year.





Kentucky Students' Right to Know



This dashboard is powered by the Kentucky Center for Statistics. Those using screen readers may need to click the enter key to select options in filters. This dashboard is best viewed on a desktop computer. If you have any questions regarding accessibility, please contact kystats@ky.gov.

Explore College and Career Opportunities

This tool is intended to help prospective students make more informed decisions about their futures and ensure that they are adequately aware of career paths and the cost of college. The tool uses historical data to provide students with insights into their potential postsecondary and workforce outcomes. Explore the data using the tabs below.

Exploring Careers

Select an occupation to explore corresponding career information and majors that align with your interests.

Best for: Students looking to make informed decisions about which academic path to pursue based on their desired profession.

Major Selection

Choose a major of interest to see the associated occupations.

Best for: Students interested in specific majors and their potential career paths.

College Comparison

Search for Kentucky public 2-year and 4-year colleges and universities based on your interests and compare their financial aid options.

Best for: Students prioritizing school selection and the associated financial aid costs.

CTE Outcomes

View information on Kentucky Career and Technical Education (CTE) programs and Apprenticeships.


Best for: Students interested in how high school programs can prepare them for postsecondary and workforce opportunities.

Postsecondary Experience


Explore detailed information about loans and employment outcomes for specific majors at each public Kentucky institution.

Best for: Students seeking a complete understanding of how much previous students have paid for a similar education and their expected employment outcomes.

Postsecondary Experience



Kentucky Students' Right to Know



Postsecondary Experience

Choose an institution and available major to get started. The results will provide a detailed overview of outcomes for students at the selected institution. In some cases data may be unavailable due to merging information across multiple data sources.

[← Return to Landing Page](#)

Select an Institution of Interest
University of Kentucky


Filter Results by a Major Available at Selected Institution
All

Results for All Major(s) at University of Kentucky

What Percent of Graduates Received a Loan?

This is the number of students that received a loan divided by all students enrolled for each academic year in that major at that institution.


Degree Level

All  50%

What is the Average Loan Amount at Graduation?

The average total loan amount accumulated at graduation for students who took out a loan in that major at that institution.

Degree Level

All  \$13,183

Postsecondary Experience

Institution of Interest: University of Kentucky
 Major Available at Selected Institution: Digital Arts

What Percent of Graduates Received a Loan?

This is the number of students that received a loan divided by all students enrolled for each academic year in that major at that institution.

Degree Level

Bachelor  40%

What is the Average Loan Amount at Graduation?

The average total loan amount accumulated at graduation for students who took out a loan in that major at that institution.

Degree Level

Bachelor  \$14,865

How Many Students Graduated in 2020 and How Long Did They Take?

Total Graduates are the number of postsecondary completers in academic year 2020. Average Years to Degree is the average time between initial enrollment and completion of degree.

Degree Level	Total Graduates	Years to Degree
Bachelor	49	3.8

How Many 2020 Graduates Had Kentucky Jobs Three Years Later?

Employment is measured three years after graduation and includes only those working in Kentucky.

Degree Level

Bachelor  45%


0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
 Percent Employed

For those Employed, What Were Their Salaries in 2023?

The salary ranges for 2020 graduates employed in Kentucky three years later.

Degree Level

Salary

Bachelor 25th Percentile  \$18,025

Median  \$34,640

75th Percentile  \$40,909

Postsecondary Experience

Institution of Interest: Bluegrass Community and Technical College

Major Available at Selected Institution: Web Page, Digital/Multimedia and Information Resources Design

What Percent of Graduates Received a Loan?

This is the number of students that received a loan divided by all students enrolled for each academic year in that major at that institution.



What is the Average Loan Amount at Graduation?

The average total loan amount accumulated at graduation for students who took out a loan in that major at that institution.



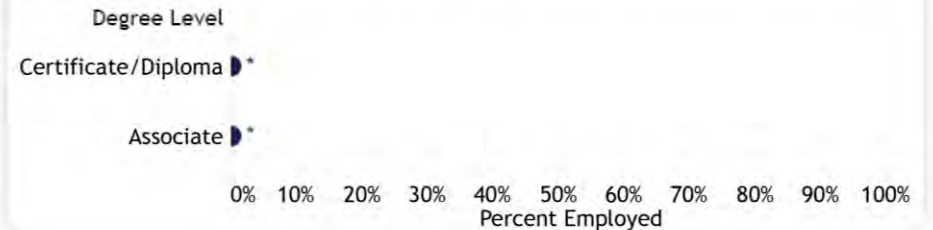
How Many Students Graduated in 2020 and How Long Did They Take?

Total Graduates are the number of postsecondary completers in academic year 2020. Average Years to Degree is the average time between initial enrollment and completion of degree.

Degree Level	Total Graduates	Years to Degree
Certificate/Diploma	12	
Associate	*	

How Many 2020 Graduates Had Kentucky Jobs Three Years Later?

Employment is measured three years after graduation and includes only those working in Kentucky.



For those Employed, What Were Their Salaries in 2023?

The salary ranges for 2020 graduates employed in Kentucky three years later.

Degree Level	Salary
Certificate/Diploma	25th Percentile
	Median
	75th Percentile
Associate	25th Percentile
	Median
	75th Percentile

Students' Right To Know



<https://kystats.ky.gov/Latest/KYStudentRightToKnow>



Innovative State Tools for Enhancing College Affordability

Christopher Ledford
Director of Data and Advanced Analytics
Kentucky Council on Postsecondary Education

Affordability: Strategic Priority

- **Affordability** is one of CPE's strategic agenda priority areas supporting the **60x30 goal**.
- To increase attainment, **higher education must be accessible and affordable**.
- **Other strategic priority areas include:**
 - **Transitions**
 - **Success**
 - **Equity**
 - **Talent**
 - **Value**

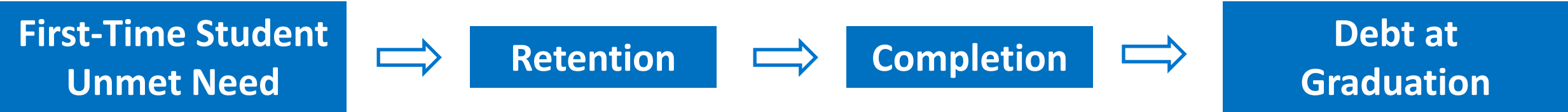


Affordability: Data-Driven Strategy

- As we zoomed in on affordability, we had **three core questions**:
 1. For **first-time students**, how does **unmet need impact retention likelihood**?
 - What are the **critical financial thresholds** where retention becomes less likely?
 2. How can we use those estimates to **inform key performance indicators (KPIs)** we set with public postsecondary institutions to **ensure system focus on affordability**?
 3. How can we adapt the inferential model to predict student retention in real-time and empower our institutions **to assist students before we lose them**?

Over time, our statewide coordination on reducing unmet need will serve to decrease **student debt at graduation**, which is our **culminating context metric around affordability**.

Affordability: Data-Driven Pipeline Strategy



Toward Better Metrics, KPIs, and Impact: Unmet Financial Need

Unmet Need: What's the Bottom Line?

- **Unmet need is a pinpoint estimate of student-level affordability challenges.**
 - **Total COA** and **net price** can muddle our understanding of affordability barriers.
 - Best practices explore how **unmet financial need** moderates the linkage between cost and enrollment behavior.

- **Defining Unmet Need**
 - What students are expected to pay after accounting for **EFC** and **any non-debt aid**.
 - UFN is the **precise value** at which affordability is most likely to affect enrollment behavior.

Calculating Unmet Financial Need

**Cost of Attendance
(Set by Institution)**

- Tuition and fees
- Room and board
- Books, supplies, transportation
- Misc. expenses

**Expected Family
Contribution (EFC)**

The amount students and their families are expected to be able to pay toward college based on a formula.

**Grant and
Scholarship Aid**

- Pell grants
- KEES money
- Scholarships
- Other aid students do not repay

**Unmet Financial
Need**

The amount students and their families must pay above and beyond EFC and aid.

Unmet Need: Maximizing Utility and Impact

- **Why first-time students?**

- Starting in the second year, next-year retention is at 90% or better. **First-time student retention is where we can make the biggest impact and close gaps.**
- Matriculating students are primarily (and overwhelmingly) most **concerned about paying for college.**

Key Takeaway: Affordability considerations likely exert the strongest impact on retention in the first year, when most students confront the decision to continue their studies or drop out.

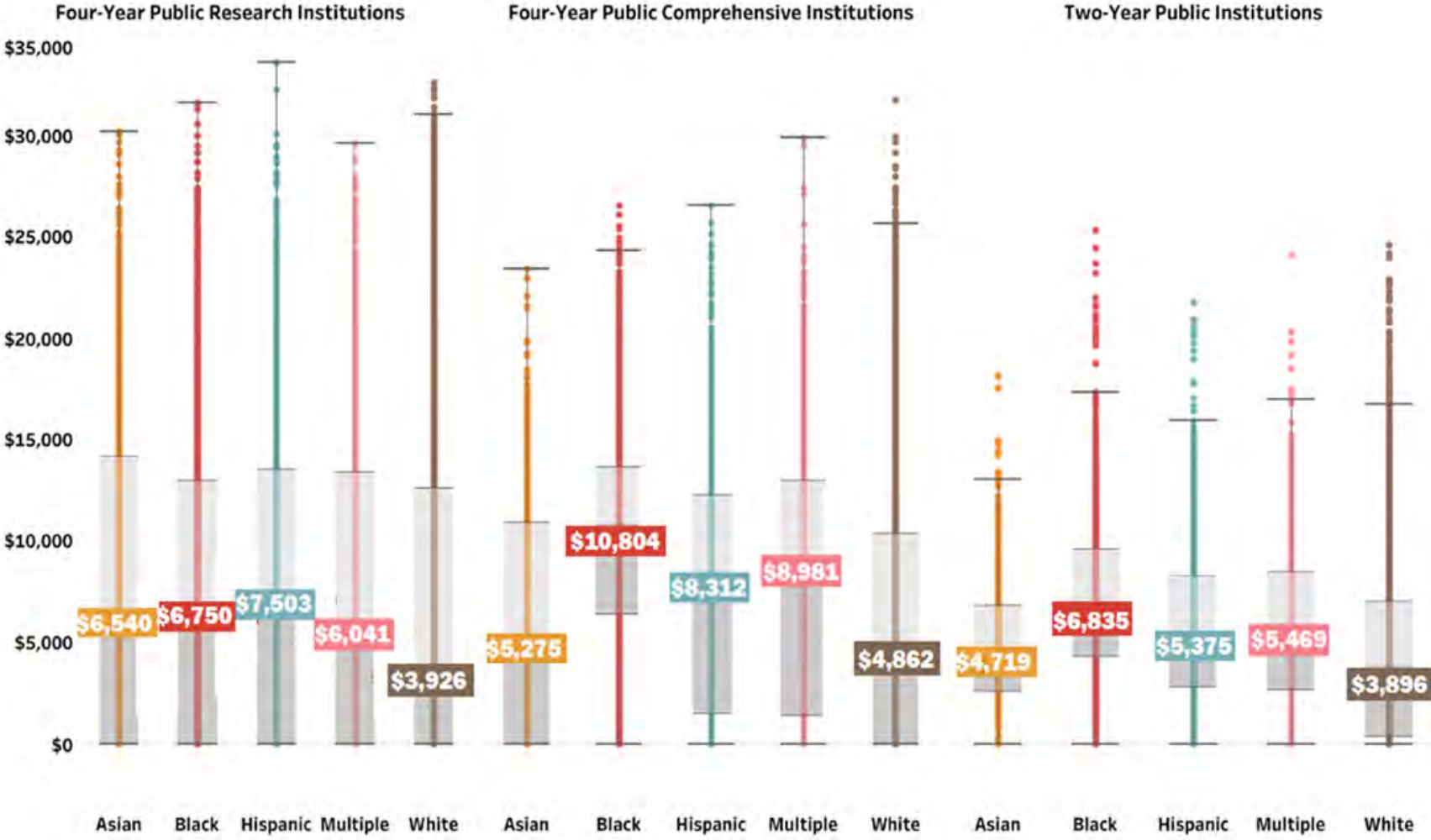
Unmet Need in Kentucky: Trend and Demographic Highlights

Trend and Demographic Analysis

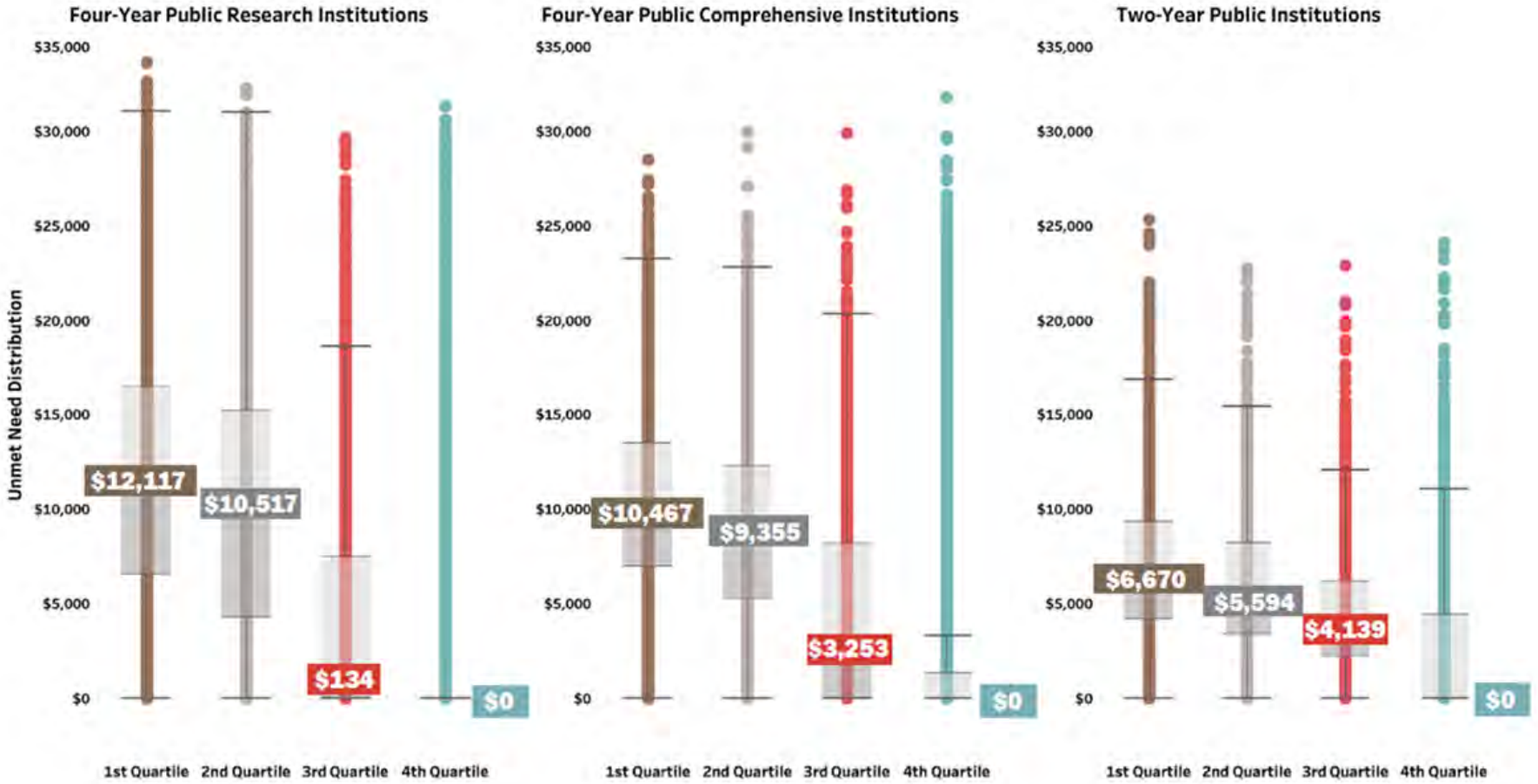
- **Sample**
 - ~ **200,000 first-time degree-seekers** in Kentucky
 - Over a **decade** of enrollment
 - Rich variance across **sector, context,** and **time**

- **Variables**
 - Unmet Financial Need
 - Cost of Attendance
 - Grant Aid – Institutional, State, and Federal

Unmet Need by Race/Ethnicity and Sector



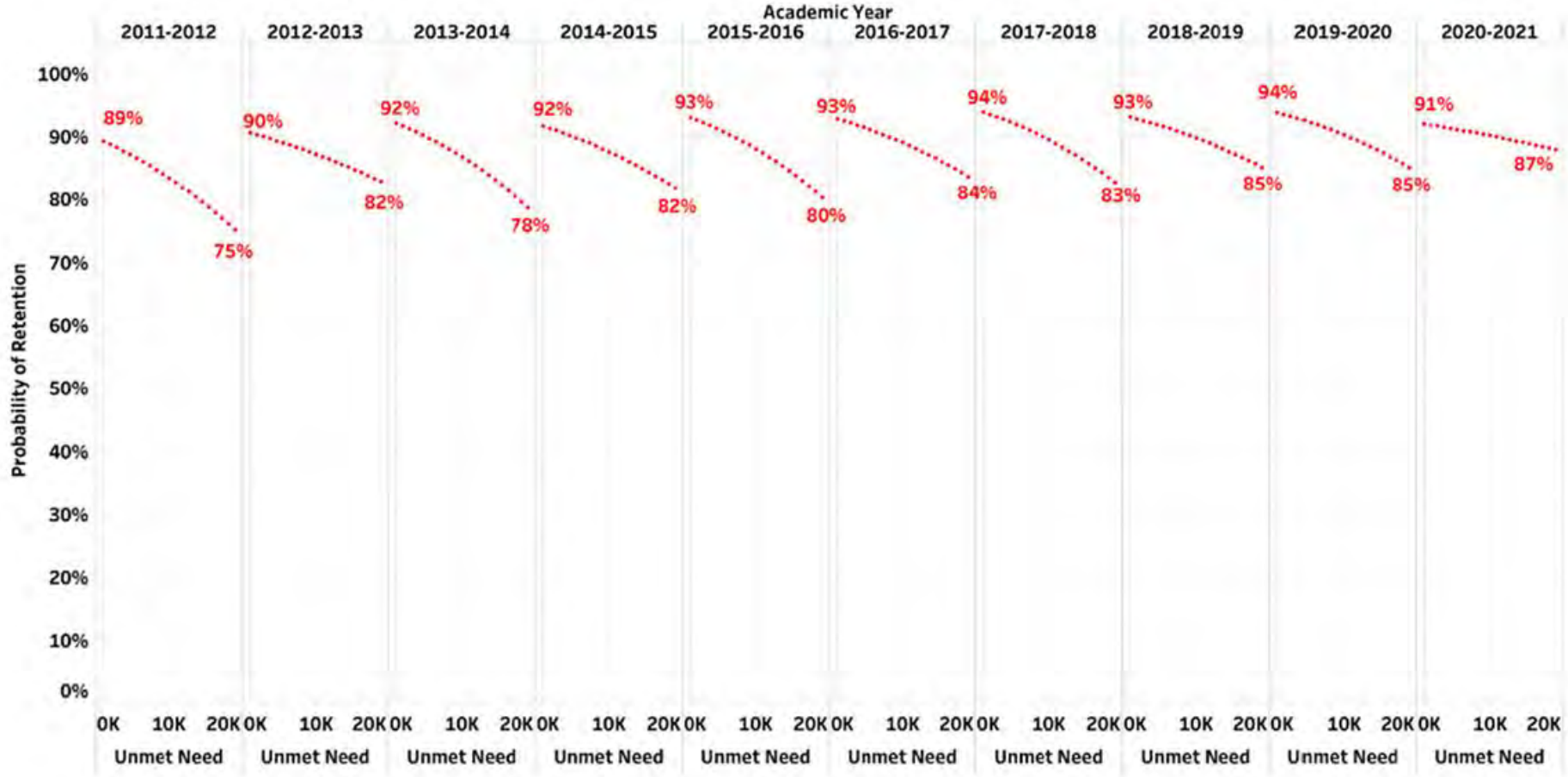
Unmet Need by Income Quartile and Sector



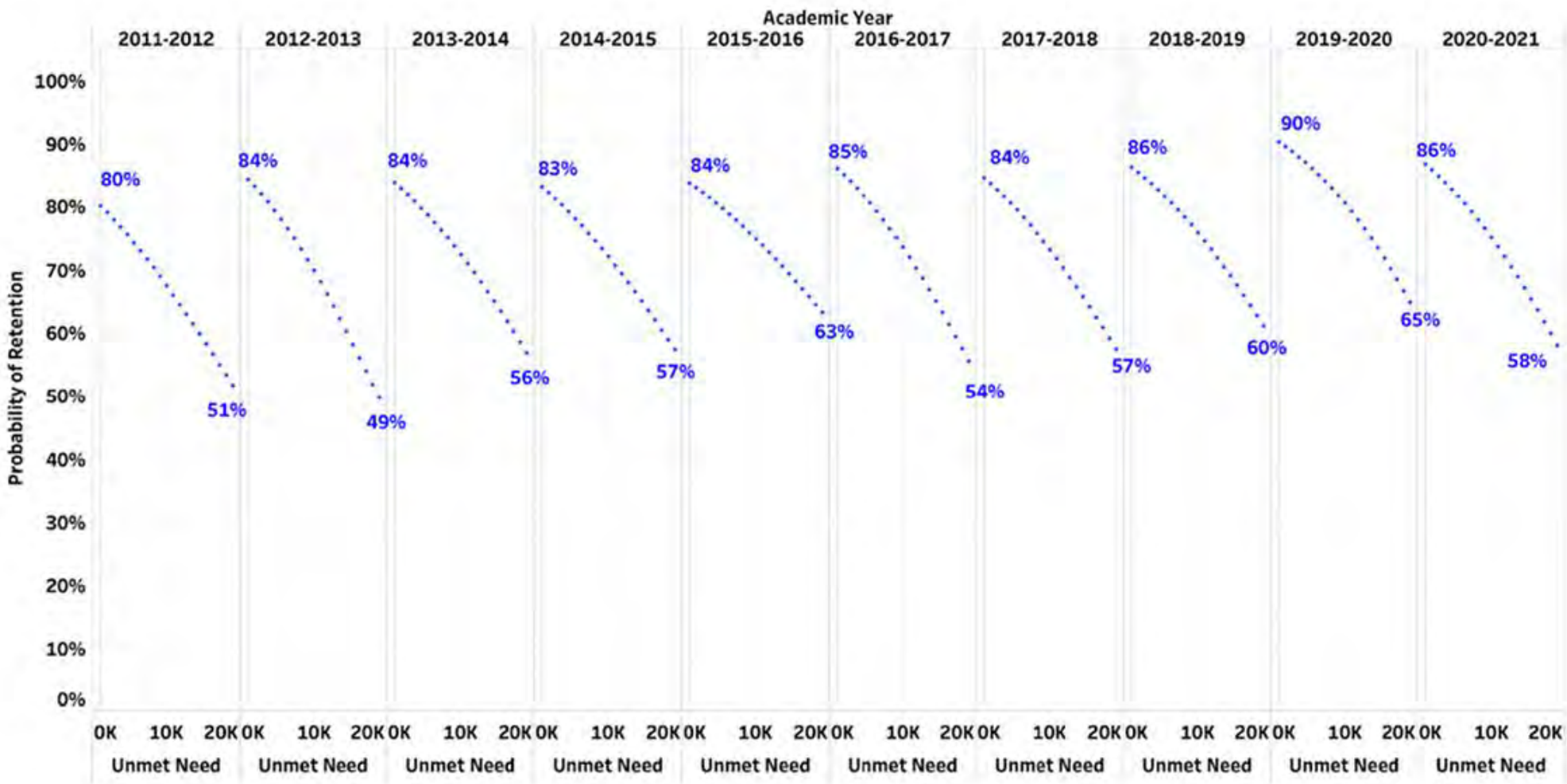
How Unmet Financial Need Impacts Retention in Kentucky



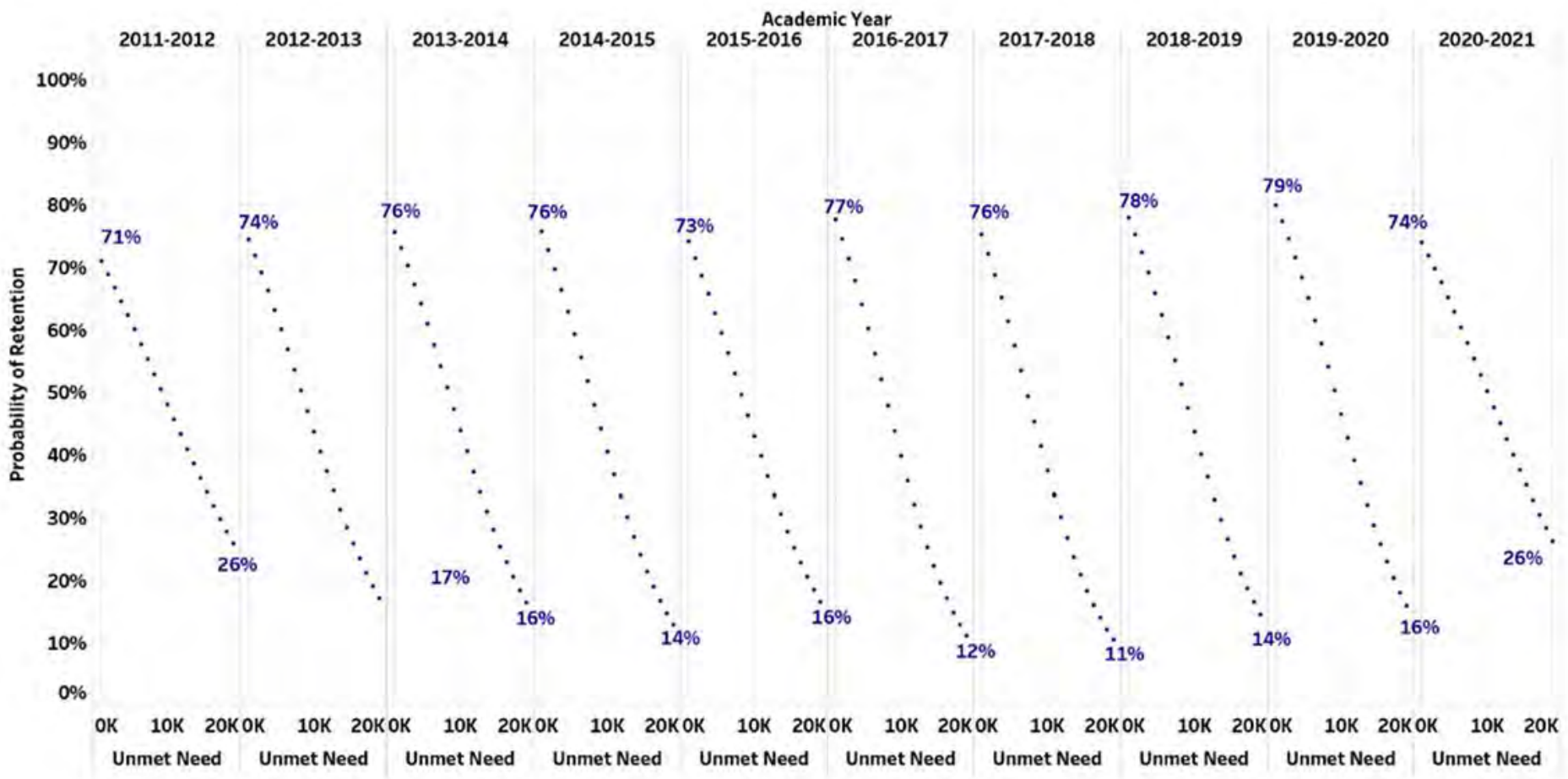
Unmet Need Endangers Retention: 4YP Research Institutions



Unmet Need Endangers Retention: 4YP Regional Institutions



Unmet Need Endangers Retention: 2YP CTCs



Unmet Need Endangers Retention of Students from Vulnerable Populations

Amount	Retention Likelihood: 4YP Regionals			Retention Likelihood: 2YP CTCs		
	All	URM	LI	All	URM	LI
No UFN	87%	87%	92%	74%	73%	82%
\$5,000 UFN	82%	79%	85%	63%	59%	65%
\$10,000 UFN	75%	69%	75%	50%	42%	44%
\$15,000 UFN	67%	57%	62%	38%	28%	25%
\$20,000 UFN	58%	43%	46%	26%	17%	12%

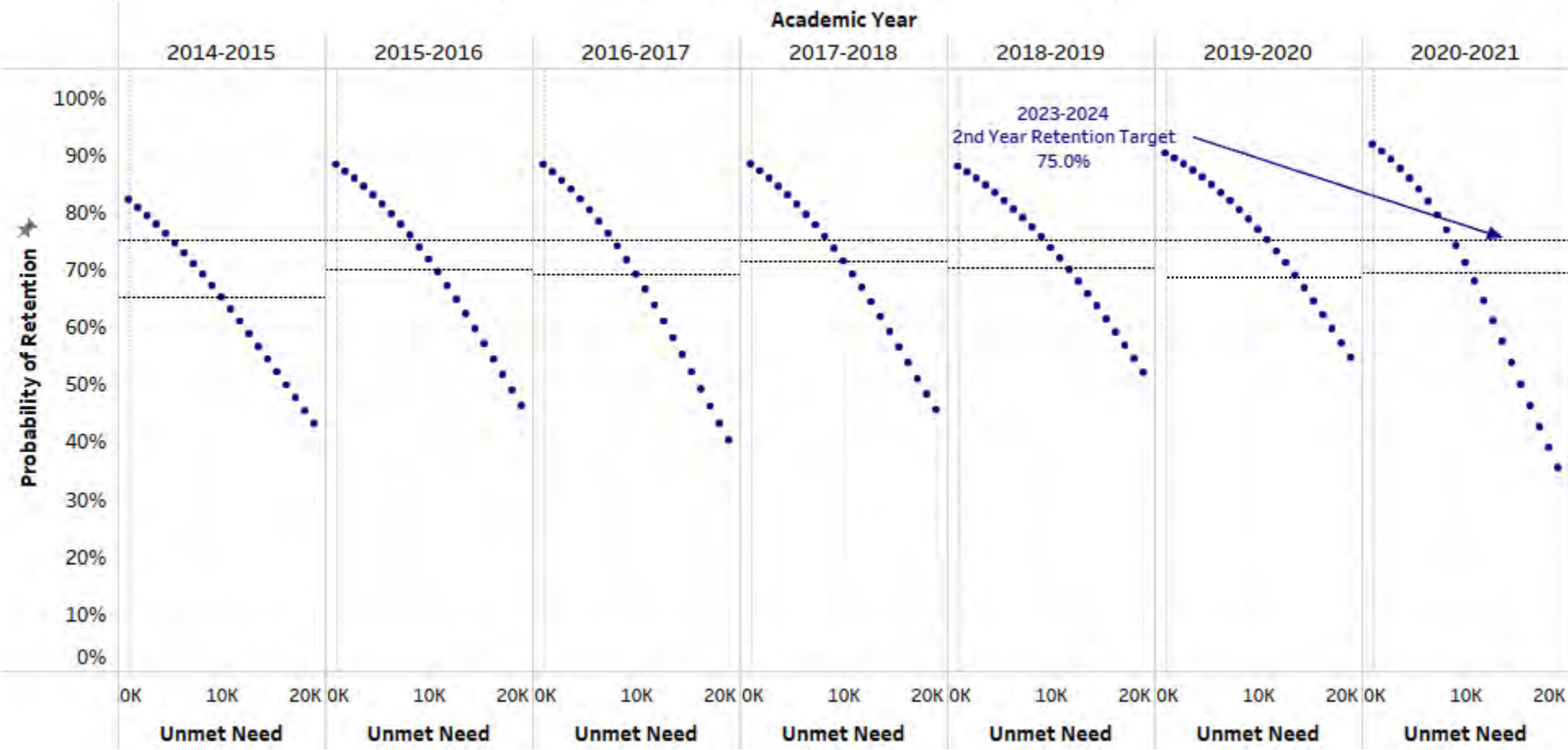
Setting Data-Driven KPI Targets

Impact

- **Data Outputs -> Institutional KPIs -> Impact**
 - The inferential model guides us in setting unmet need targets.
 - Targets have more empirical foundation based on where unmet need makes retention less likely relative to the institution and sector average.

Impact

Target Setting with Red River Gorge University



Making a Difference with Predictive Analytics


Impact

- **Data Outputs -> Institutional KPIs -> Impact**
 - The inferential model guides us in setting unmet need targets.
 - Targets have more empirical foundation based on where unmet need makes retention less likely relative to the institution and sector average.
 - **Putting the inferences into real-time, practical applications is how we will hit those targets and keep improving affordability.**

Predictive Model

- **The model is estimated in R.**
 - Simple and **free to use.**
 - Communicates with **other programs**, particularly those based in SQL language.
- **Model is stored in SQL Server.**
 - This is where institutions upload all **individual-level student records.**
 - This facilitates **easy upload for end-users.**
 - Each year institutions upload data to KPEDS, **the model updates with the latest year of data.**
- **Generalizability, Simplicity, Accuracy**

Practical Application: UI

**KPEDS-DS**
Kentucky Postsecondary Education Data System
Data Scaffold

Welcome, **Christopher Ledford**
Council on Postsecondary Education

[Home](#) | [Dashboard](#) | [PDP Reports](#) | [Performance Funding Reports](#) | [Other Reports](#) | [Help](#) | [Log Out](#)

[Back](#)

KPEDS-DS: On-Demand Collections

Upload File

<input type="button" value="Browse..."/> No file selected.	Description: <input style="width: 90%;" type="text"/>	<input type="button" value="⬆"/>
--	--	----------------------------------

On-Demand File List

File Name	File Description	Load Date	Download	Delete
-----------	------------------	-----------	----------	--------

Practical Application: Upload

	A	B	C	D	E	F	G	H	I	J	K
1	Academic_Year	Institution_Name	Full_Time	URM	Gender	Underprepared_Overall	Dual_Credit	GPA_1st_AY	Unmet_Need	EKCEP	First_Gen
2	201112	Ledford College of Excellence	1	0	Female	0	1	2.20	\$12,707	1	1
3	201112	Ledford College of Excellence	1	0	Female	0	0	4.00	\$1,519	1	1
4	201112	Ledford College of Excellence	1	0	Female	0	0	1.90	\$13,624	0	1
5	201112	Ledford College of Excellence	1	0	Male	0	0	3.15	\$0	0	1
6	201112	Ledford College of Excellence	1	0	Male	0	0	3.27	\$8,461	0	1
7	201112	Ledford College of Excellence	1	0	Male	0	1	3.11	\$7,133	0	1
8	201112	Ledford College of Excellence	1	0	Female	0	1	3.90	\$256	0	1
9	201112	Ledford College of Excellence	1	0	Female	0	0	3.66	\$0	0	1
10	201112	Ledford College of Excellence	1	0	Female	0	1	3.20	\$12,549	0	1
11	201112	Ledford College of Excellence	1	0	Male	0	1	3.90	\$0	0	1
12	201112	Ledford College of Excellence	1	0	Male	1	0	NULL	\$14,566	0	1
13	201112	Ledford College of Excellence	1	0	Male	0	0	2.70	\$0	0	1
14	201112	Ledford College of Excellence	1	0	Male	1	0	3.11	\$0	0	1
15	201112	Ledford College of Excellence	1	0	Female	0	0	3.36	\$9,452	0	1
16	201112	Ledford College of Excellence	1	1	Female	1	0	0.85	\$11,811	0	1
17	201112	Ledford College of Excellence	1	0	Female	1	0	2.55	\$6,434	0	1
18	201112	Ledford College of Excellence	1	0	Male	1	0	2.00	\$0	0	1
19	201112	Ledford College of Excellence	1	0	Female	1	0	2.00	\$12,863	0	1
20	201112	Ledford College of Excellence	1	0	Female	0	0	2.83	\$10,673	0	1

Practical Application: Output



	A	B	C	D	E	F	G	H	I	J	K	L
1	Academic_Year	Institution_Name	Full_Time	URM	Gender	Underprepared_Overall	Dual_Credit	GPA_1st_AY	Unmet_Need	EKCEP	First_Gen	Retention Prediction
2	201112	Ledford College of Excellence	1	0	Female	0	1	2.20	\$12,707	1	1	52.7%
3	201112	Ledford College of Excellence	1	0	Female	0	0	4.00	\$1,519	1	1	94.1%
4	201112	Ledford College of Excellence	1	0	Female	0	0	1.90	\$13,624	0	1	43.6%
5	201112	Ledford College of Excellence	1	0	Male	0	0	3.15	\$0	0	1	88.3%
6	201112	Ledford College of Excellence	1	0	Male	0	0	3.27	\$8,461	0	1	84.5%
7	201112	Ledford College of Excellence	1	0	Male	0	1	3.11	\$7,133	0	1	83.8%
8	201112	Ledford College of Excellence	1	0	Female	0	1	3.90	\$256	0	1	94.7%
9	201112	Ledford College of Excellence	1	0	Female	0	0	3.66	\$0	0	1	92.8%
10	201112	Ledford College of Excellence	1	0	Female	0	1	3.20	\$12,549	0	1	79.9%
11	201112	Ledford College of Excellence	1	0	Male	0	1	3.90	\$0	0	1	95.1%
12	201112	Ledford College of Excellence	1	0	Male	1	0		\$14,566	0	1	
13	201112	Ledford College of Excellence	1	0	Male	0	0	2.70	\$0	0	1	81.8%
14	201112	Ledford College of Excellence	1	0	Male	1	0	3.11	\$0	0	1	88.3%
15	201112	Ledford College of Excellence	1	0	Female	0	0	3.36	\$9,452	0	1	84.2%
16	201112	Ledford College of Excellence	1	1	Female	1	0	0.85	\$11,811	0	1	24.7%
17	201112	Ledford College of Excellence	1	0	Female	1	0	2.55	\$6,434	0	1	71.9%
18	201112	Ledford College of Excellence	1	0	Male	1	0	2.00	\$0	0	1	67.4%
19	201112	Ledford College of Excellence	1	0	Female	1	0	2.00	\$12,863	0	1	48.5%
20	201112	Ledford College of Excellence	1	0	Female	0	0	2.83	\$10,673	0	1	72.9%

Impact

- **Intervention**

- This simple but robust approach helps institutions **identify at-risk students** and intervene with aid or other financial assistance **before it is too late**.
 - Inferential models provide value in setting goals, KPIs, and setting a foundation for impactful action.
 - Predictive models facilitate real-time data-driven strategies.

- **Cost Savings**

- Feedback suggests further benefits of **cost-savings** to institutions.

- **Cumulating Context Metric**

- System focus on **reducing first-time unmet need** will **reduce student debt at graduation**, thereby **increasing postsecondary ROI** to students and the Commonwealth.

Stay Connected



Twitter: **CPENews and CPEPres**



Data Center: **cpe.ky.gov/data**



Newsletter: **cpe.ky.gov/news/subscribe**