



Data Analytics and Retention Strategies at The University of Southern Mississippi

Inside Higher Ed Webcast, April 2022

Introduction to Presenter

**Dr. Amy Chasteen,
Executive Vice Provost for Academic Affairs**

- Twenty-five-year career at The University of Southern Mississippi, as a faculty member and an administrator
- Applies sociological, data-informed perspectives to strategic analysis and change management around student success, faculty development, and enrollment management.
- Passionate about equity-minded approaches to leading the next phase of higher education in a COVID-informed and influenced reality.



Agenda

- USM Background & Presenter Introduction
- Investment in Analytics
- Strategic Enrollment Management
- Example Case Studies
- What's Next
- Questions

USM Background

- Founded in 1910, The University of Southern Mississippi is a public, comprehensive research university (R1) located near the Gulf of Mexico, about 100 miles east of New Orleans.
- **Our fall 2021, enrollment includes 10,638 undergraduate students and 3,442 graduate students, both online and face-to-face.**
- We pride ourselves on balancing an exceptional, internationally known research profile with an emphasis on student-centered pedagogy and support, leveraging our unique context to accelerate the success of our diverse student body.
- We are one of eight public institutions of higher learning in a small state and, like many universities, face increasing budgetary challenges and a competitive environment for student recruitment.



Initial Investment in Analytics

“ Most of the world will make decisions by either guessing or using their gut. They will be either lucky or wrong.”

Suhail Doshi, chief executive officer, [Mixpanel](#).

“Information is the oil of the 21st century, and analytics is the combustion engine.”

Peter Sondergaard, Senior Vice President,
Gartner, Inc.

“Without data you’re just another person with an opinion.”

Vinod Khosla, co-founder,
Sun Microsystems, LS9, Inc.

Cultivating Data-Grounded Leadership, 2018-2020

- **Restructuring Institutional Research**
 - Greater service-orientation and visibility on campus
 - Increased emphasis on analytics and data sharing
- **Creating expectations and accountability for leadership**
 - Peer data averages
 - Dashboard monitoring
- **Centering data in proposal processes**



Cultivating Data-Grounded Leadership, 2020-forward

- **Optimizing academic programming**
 - Identifying and expanding revenue centers
 - Strategically managing cost centers
 - Redesigning or sunsetting under-performing programs
- **Reimagining targeted retention efforts**
- **Realigning financial aid and scholarships**



Strategic Enrollment Management

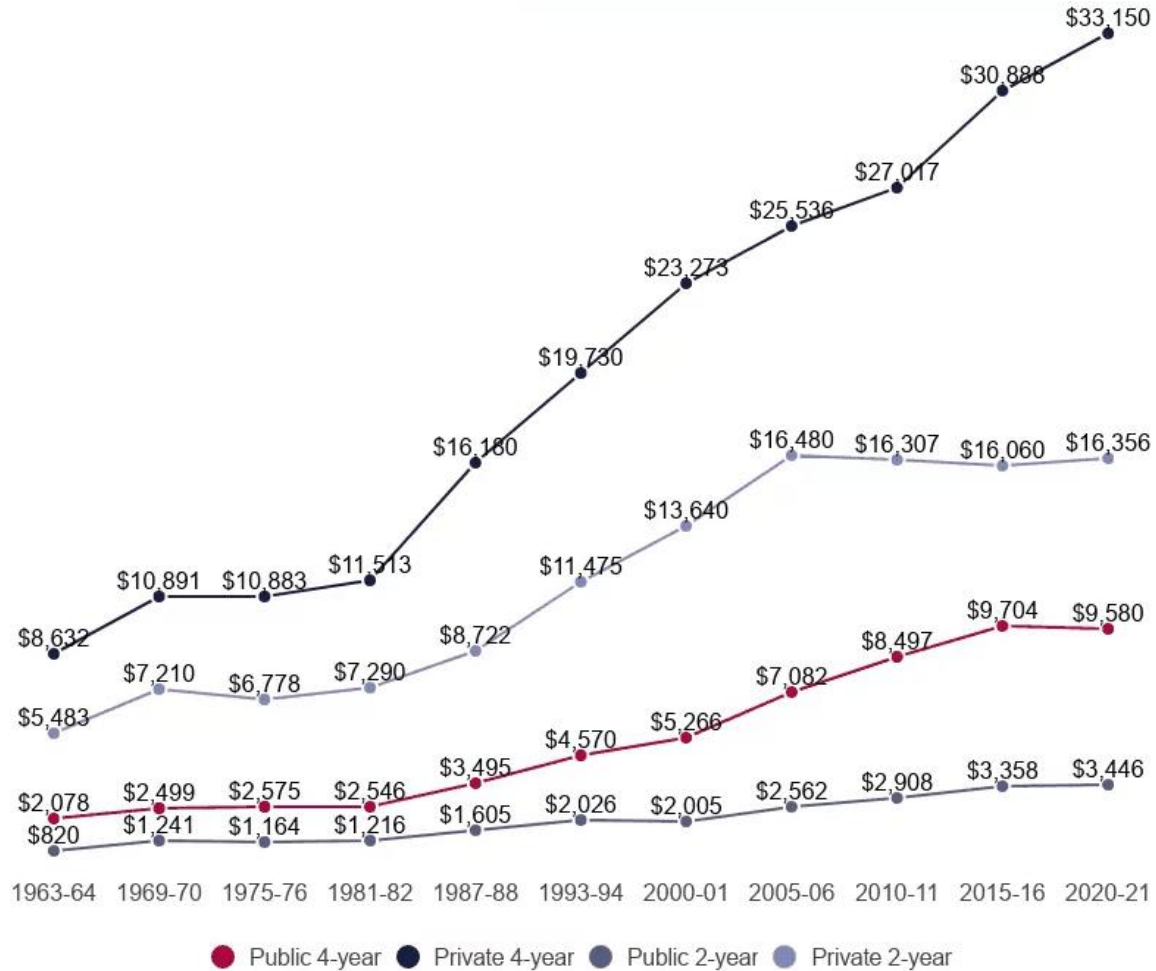
Effective management of enrollment in today's emerging higher education context includes

- Responding to questions about the value and relevance of a college education
- Meeting the needs of increasingly diverse student bodies
- Addressing increased expectations for online course and program options
- Balancing (sometimes) competing recruitment and retention demands

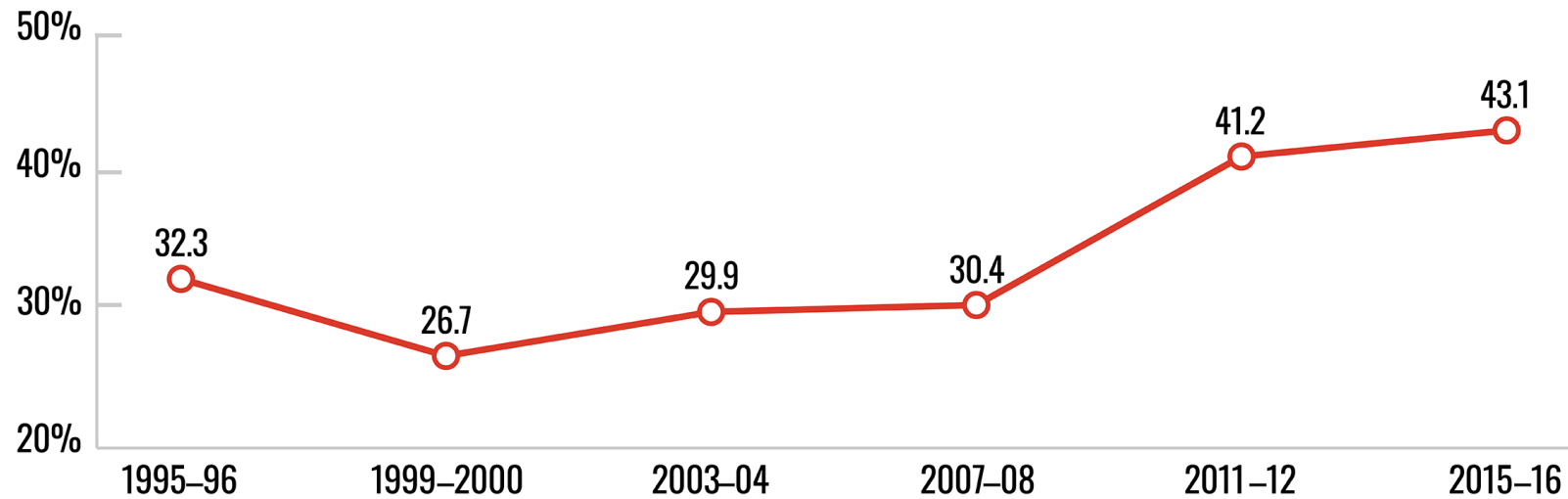
A future-focused, enrollment management lens must recognize the complexity of enrollment management and lean on data for strategic leadership.



Historical Cost of College Tuition & Fees in 2021 Dollars



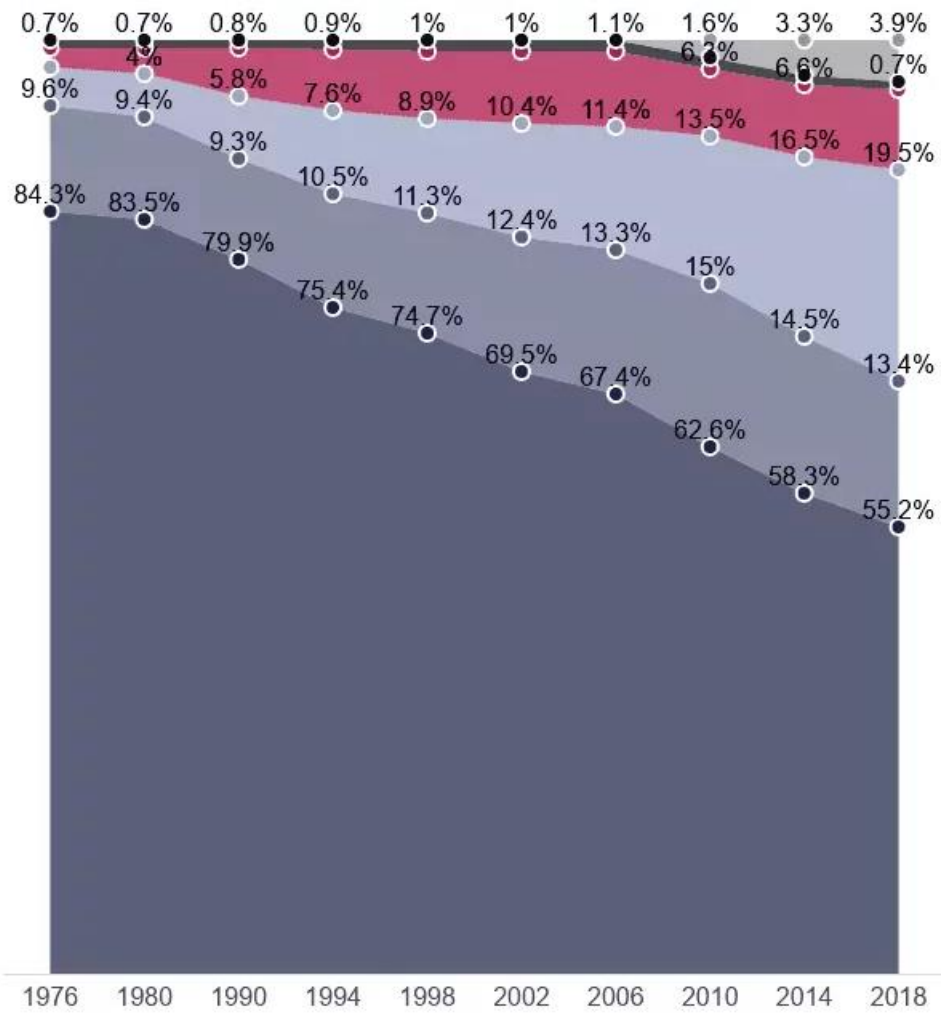
Share of All Undergraduates Who Were Low Income: 1995-96 to 2015-16



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 1996, 2000, 2004, 2008, 2012, and 2016

Note: Low-income undergraduates are those whose family income (for dependent students) or individual income (independent students) is at or below 150% of the federal poverty threshold.

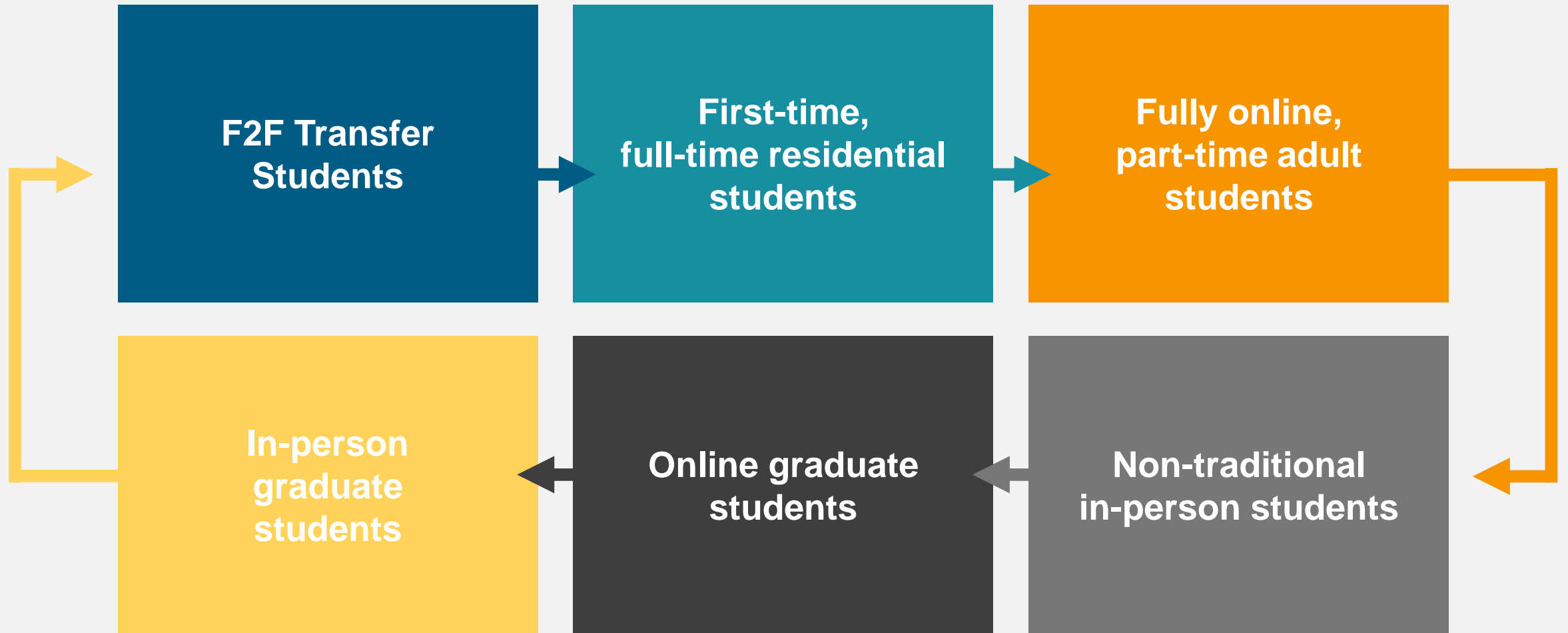
Racial Demographic Trends in College Enrollment



- White ● Black ● Hispanic ● Asian/Pacific Islander
- American Indian/Alaska Native ● Two or More Races*

*A multiracial category did not appear until 2010

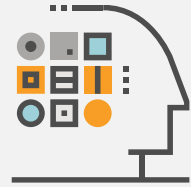
Changing Composition of Enrolled Students



Strategic Enrollment Management Goals & Strategies



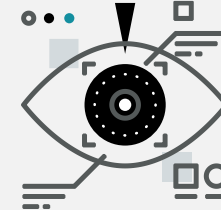
**Lean on
Data**



**Mind the
Complexity**



**Focus on
the Whole**



**Eye towards
the Change**



**Adjust
Intentionally**

Case in Point: Understanding the Power of Need

Overall Enrollment: Recruited Students + Retained Students

What financial packaging speaks to each? Is it possible to speak to both?



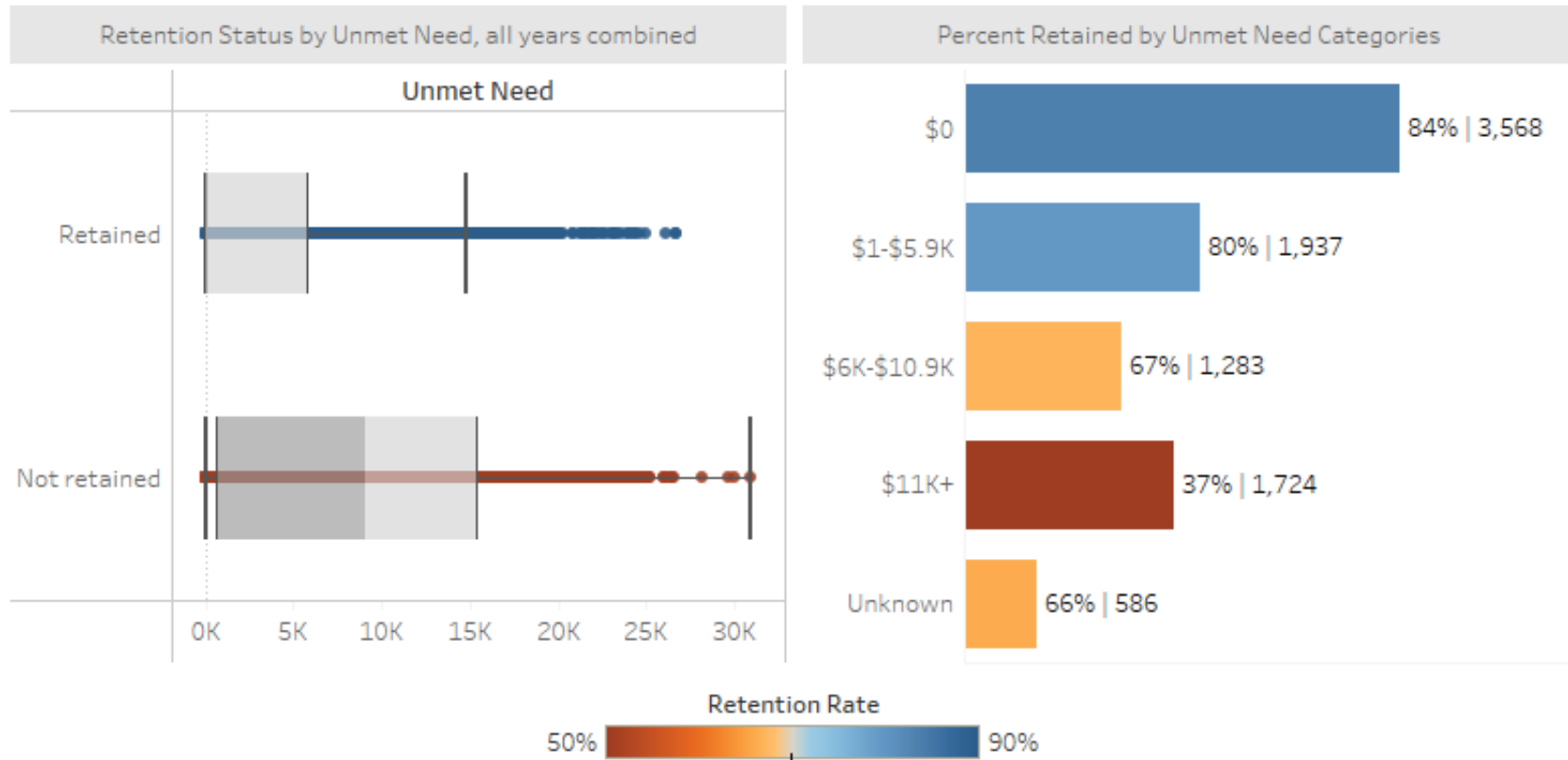
Example: USM Institutional Awards for Incoming Freshman

Scholarship Amount Breakdown by Test Scores

| ACT/SAT Equivalent | Annual Amount | Total Over 4 Years |
|--------------------|-----------------------|-------------------------|
| 30-36 | Full Value of Tuition | Total Amount of Tuition |
| 27-29 | \$7,000 | \$28,000 |
| 24-26 | \$5,000 | \$20,000 |
| 21-23 | \$3,000 | \$12,000 |

- Students must have a **high school core gpa of 3.0** or higher
- All awards are automatically renewed for a total of **4 years (8 consecutive fall/spring semesters)** in accordance to the student maintaining scholarship stipulations each semester.
- Full tuition scholarships will increase as tuition rates increase. Tuition rates are subject to change without notice by the Board of Trustees of the Mississippi Institutions of Higher Learning.

Case in Point: Understanding the Power of Need



WHAT'S IMPORTANT?

- *Length* of the bar represents the number of students
- *Color* represents retention rate
- Overall, students with higher unmet need retain at lower rates

Case in Point: Understanding the Power of Need

Explore Retention by Unmet Need, None and HS GPA Cut Points

| | | HS GPA Cut Points | | | | | | | |
|--------------------|--------------|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | | 0.0 - 2.0 | 2.1 - 3.0 | 3.1 - 3.3 | 3.4 - 3.7 | 3.8 - 3.9 | 4.0 | Unknown HS GPA | Grand Total |
| Grand Total | | 56.90% 116 | 53.51% 2,134 | 63.82% 1,556 | 73.90% 2,188 | 84.31% 1,364 | 92.07% 1,123 | 77.42% 31 | 70.79% 8,512 |
| Unmet Need None | \$0 | 77.27% 44 | 68.69% 725 | 79.32% 561 | 85.33% 866 | 89.40% 651 | 95.59% 703 | 88.89% 18 | 83.69% 3,568 |
| | \$1-\$5.9K | 68.18% 22 | 66.30% 368 | 73.58% 352 | 81.17% 547 | 88.16% 380 | 92.75% 262 | 66.67% 6 | 79.71% 1,937 |
| | \$6K-\$10.9K | 44.44% 18 | 54.99% 351 | 63.67% 278 | 69.94% 356 | 81.08% 185 | 85.87% 92 | 66.67% 3 | 66.87% 1,283 |
| | \$11K+ | 28.13% 32 | 30.00% 690 | 30.68% 365 | 44.15% 419 | 56.08% 148 | 60.61% 66 | 50.00% 4 | 37.01% 1,724 |



WHAT'S
IMPORTANT?

- You can start to see that unmet need and GPA matter. No matter how high the students GPA, if you have significant enough unmet need, you will still not persist. The inverse is true as well.

Case in Point: Understanding the Power of Need



WHAT'S IMPORTANT?

- *Thickness* of the bars = size of population.
- *Color* indicates Pell Eligible Status with Pell-eligible students in purple and non-Pell in gold.
- Above \$6k unmet need, retention rates for Pell and non-Pell students dip below average retention.
- Retention for Pell-Eligible students is lower overall.
- The top chart shows the power of institutional scholarships. Pell students getting awards are at or above the average retention rates at all levels.
- Institutional Academic Excellence = 0 are those *not* receiving aid.

What's Next?

Optimizing Enrollment through Dual-Focused Scholarship Modeling



What's Next?

Retention Rate is adjusted based on the Retention Rate of the lower unmet need band. This analysis uses **Full Scenario** retention rate.*

| | Headcount | Retention Rate | Retention Count | Avg. Isir Fed Unmet Need | Avg Out of Pocket Cost | Scenario Avg. Unmet Need | Scenario Retention Rate | Scenario Retention Count | Scenario Retention Count Change | Scenario Additional Aid Required | Scenario Added Aid per student |
|-------|-----------|----------------|-----------------|--------------------------|------------------------|--------------------------|-------------------------|--------------------------|---------------------------------|----------------------------------|--------------------------------|
| 0 | 429 | 89.0% | 382 | \$0 | 8,449 | \$0 | 89.0% | 382 | 0 | \$0 | \$0 |
| 1 | 330 | 90.3% | 298 | \$939 | 7,283 | \$0 | 90.3% | 298 | 0 | \$309,877 | \$939 |
| 2000 | 296 | 86.1% | 255 | \$3,081 | 9,301 | \$939 | 90.3% | 267 | 12 | \$633,951 | \$2,142 |
| 4000 | 244 | 80.7% | 197 | \$4,898 | 10,433 | \$3,081 | 86.1% | 210 | 13 | \$443,406 | \$1,817 |
| 6000 | 191 | 77.0% | 147 | \$7,025 | 13,171 | \$4,898 | 80.7% | 154 | 7 | \$406,168 | \$2,127 |
| 8000 | 186 | 74.2% | 138 | \$8,955 | 14,078 | \$7,025 | 77.0% | 143 | 5 | \$359,017 | \$1,930 |
| 10000 | 142 | 73.9% | 105 | \$10,917 | 15,224 | \$8,955 | 74.2% | 105 | 0 | \$278,706 | \$1,963 |
| 12000 | 171 | 56.7% | 97 | \$12,814 | 15,858 | \$10,917 | 73.9% | 126 | 29 | \$324,251 | \$1,896 |
| 14000 | 107 | 43.0% | 46 | \$14,900 | 15,891 | \$12,814 | 56.7% | 61 | 15 | \$223,288 | \$2,087 |
| 16000 | 94 | 31.9% | 30 | \$16,984 | 18,342 | \$14,900 | 43.0% | 40 | 10 | \$195,866 | \$2,084 |
| 18000 | 54 | 31.5% | 17 | \$18,754 | 18,204 | \$16,984 | 31.9% | 17 | 0 | \$95,548 | \$1,769 |
| 20000 | 51 | 19.6% | 10 | \$21,965 | 19,413 | \$18,754 | 31.5% | 16 | 6 | \$163,784 | \$3,211 |

Excludes students who did not submit a FAFSA and have unknown unmet need.

***Full Scenario** retention rate is inherited from the lower unmet need band. **Conservative Scenario** retention rate is set to midway between the actual retention rate and one unmet need band lower. Each group will maintain their existing retention rate if higher than that of the lower unmet need band.

Filter Settings

HS GPA Cut Points: 3.4 - 3.7, 3.8 - 3.9, 4.0

Super ACT Cut Points: All

Pell Status Level: Max Pell & Pell

Tuition Residency: *, Mississippi Resident, Non Resident

Term Year: Fall 2015-2016, Fall 2016-2017, Fall 2017-2018 and 3 more

A woman with glasses, wearing a dark sleeveless top, stands at the front of a meeting room, gesturing with her hands as if presenting. She is holding a small device in her right hand. In the foreground, several people are seated at desks, facing her. One man on the left is looking towards her. In the background, another man is sitting at a desk with a laptop, looking towards the presenter. The room has a brick wall and a whiteboard. The entire image is overlaid with a semi-transparent orange filter.

Questions?

Thank you

HelioCAMPUS

