



# Strategic Use of Grant Aid, 101

Understanding the Mechanics of  
Aid Optimization

Enrollment  
Management  
Forum





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## About This Briefing

Whether your institution is a small, expensive private college that began working with aid optimization consultants decades ago or a large, low-cost regional public university that only recently felt a need for more strategic use of aid, all universities must be sure they are getting the most from their allocation of financial aid. The challenge is that financial aid optimization is complex. It's hard to know what strategic use of institutional funds looks like and whether or not your university is getting the most out of preciously scarce financial resources.

This short briefing is a primer on institutional grant aid, the money your university gives students to offset the cost of attendance. It will help university leaders understand the basics of aid strategy and assess whether or not their institution is deploying limited aid resources efficiently.

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# 1 Is There a Crisis? Evaluating the Present State of Aid Allocation

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The “crisis” of discounting at private colleges and whether public universities are progressing down an unsustainable path behind them

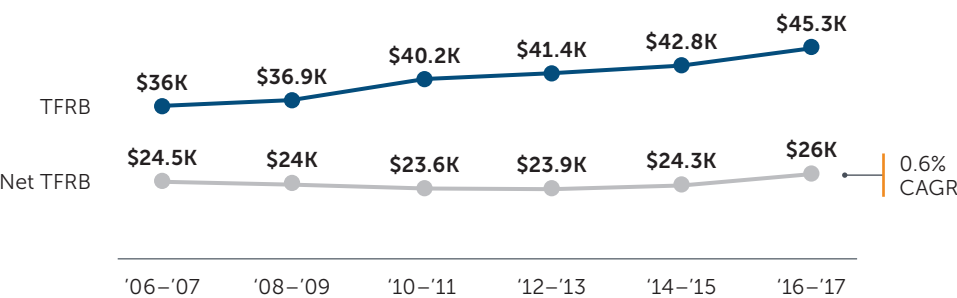
# Net Tuition Revenue Not Keeping Pace with Price Increases

## Private Colleges Fear Diminishing Returns from Tuition Discounting

For the past decade at private colleges, while list prices have continued to rise, net tuition revenue growth has been anemic, barely above the rate of inflation. This is a new phenomenon for private colleges. For most of the decade before the recession, tuition revenue grew at a steady rate, even as list prices increased faster than net prices. The change in revenue growth prompts institutional leaders to consider if there is some alternative pricing and aid strategy their institutions should employ. As we explain later, while revenue growth is often presented in the context of financial aid, aid strategy isn't responsible for revenue stagnation.

### Published vs. Net Tuition, Fees, Room, and Board (TFRB) at Private Universities

Four-Year, Not-For-Profit Institutions, 2006–2016



38.6%

NACUBO-reported discount rate for FTFT freshmen in 2006–2007



49.1%

NACUBO-reported discount rate for FTFT freshmen in 2016–2017



# Conflicting Messages on Affordability, Finances

## Criticism of Both Affordability and Finances Leads to Questions About Aid Model

News sources deliver conflicting messages about affordability and finances. The mainstream press focuses on a perceived lack of affordability. Outlets tout outrageous amounts of debt and high sticker prices as the uniform financial reality of private higher education. At the same time, the higher education press focuses on the financial sustainability of discounting, suggesting that universities are “giving away” too much money in aid.

The combination of articles in the mainstream and trade press leads to a pair of logical questions for those tasked with making strategic decisions about pricing and aid. If the list price is turning students off and the high discounts are financially risky, why not cut the list price and/or lower the discount rate? Either of these strategies poses a major risk to the college, but a comprehensive understanding of the risk is only possible with a comprehensive understanding of the current strategy: aid optimization.

### Mainstream News Focuses on Unaffordability of Private Colleges



“Are Private Colleges Too Expensive?” —*The Huffington Post*

“Middle-Class Squeeze: Is an Elite Education Worth \$170K in Debt?” —*CNBC*

“Why Attending a Private College Might Not Be Worth the High Cost” —*Money*

“Private Colleges Are a Waste of Money for White, Middle-Class Kids” —*The Washington Post*

“Should we lower the sticker price?”

### Trade Press Focuses on Financial Unsustainability of Private Colleges



“Is Tuition Discounting Leading Some Colleges Off a Cliff?” —*The Chronicle of Higher Education*

“Discounting the Price of College to Influence Student Enrollment Is a Risky Business” —*University Business*

“One-Third of CBOs Believe Their Discount Rates Are Unsustainable” —*Inside Higher Ed*

“Can we lower the discount rate?”

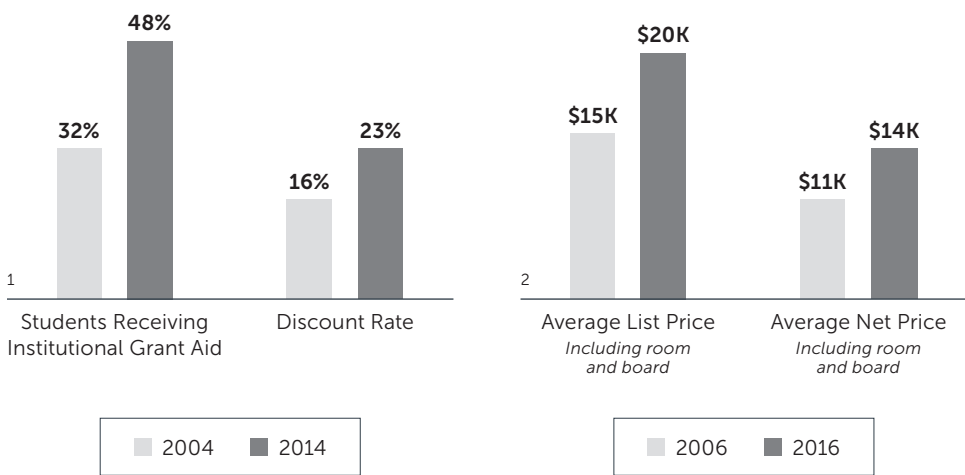
# Publics Embrace Discounting...

## ...To Increase Revenue and Stay Affordable

Due to their lower cost, public universities arrived later to this strategy of discounting than their private counterparts. Nonetheless, the data clearly point to public universities having adopted the same kinds of discounting strategies that private colleges began adopting 20–30 years ago.

As states cut funding in the wake of the recession, public universities had to make up for these cuts with tuition revenue, while simultaneously remaining affordable for low-income students. The only way to achieve this balance is to engage in price differentiation, charging higher tuition to those students able, willing, and prepared to pay more, while charging less to those who are not. A discounting strategy allows public universities to differentiate prices not just for out-of-state and international students, but also for in-state students charged the same list price.

### Core Aid Metrics Point to Increased Discounting at Public Universities



1 Trends in College Pricing, The College Board, 2016.

2 EAB Analysis of IPEDS Data.

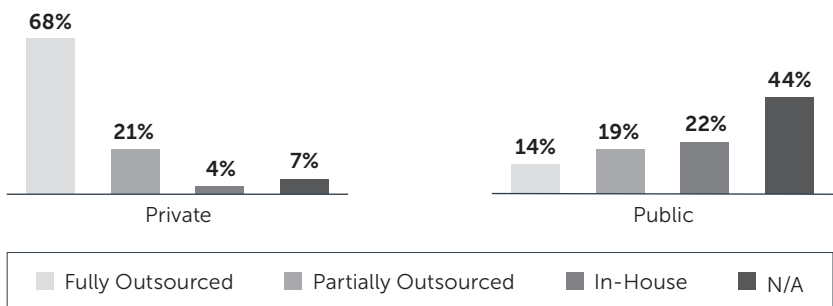
# But Lack of Resources and Latitude Hamstrings Efforts to Be More Strategic

## Public Universities Invest Less in Student Recruitment, Don't Control Key Elements of Pricing

Public university enrollment teams have neither the resources nor the latitude of their private competitors. Notably, while nearly 90% of private colleges report working with a vendor for some or all of their financial aid optimization, nearly half of public universities report “not applicable” with respect to financial aid optimization—not that they don’t outsource it, but that they don’t do it at all. To get the latitude to be more flexible with aid, enrollment management teams need the resources to prove that aid optimization can be effective, but even procuring the resources for a small pilot can prove difficult.

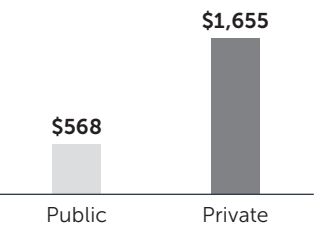
### Public Universities Less Likely to Partner with Aid Optimization Consultant

Percentage of EMs Reporting Varying Levels of Outsourcing for Aid Optimization



### Private EM Budgets Three Times Those of Publics'

Average EM Budget/Student



### Key Pricing Elements Public EMs Don't Control

- **List Price:** List price often controlled by the Board of Trustees or the state legislature
- **FA Budget:** The CFO/CBO, alone or in combination with other stakeholders, typically determines how much aid the university can “spend”
- **Aid Policy Changes:** Deciding to increase merit aid or need aid or to replace one with the other must be agreed to by wide range of stakeholders through shared governance process

# Guidelines for Productive Aid Strategy Meetings

## Public and Private Institutions Face the Same Challenges with Aid

Although the cabinet-level questions at public and private universities manifest differently, the core challenge is the same: how to allocate aid as efficiently as possible to meet enrollment goals. Discussions at public universities frequently focus on limiting the expense of aid or minimizing tuition increases, while discussions at private colleges are concerned with minimizing discount rate or possibly resetting tuition. However, such questions—although entirely reasonable given the present discourse around aid—belie a fundamental disconnect with how aid should be used: **aid is a tool to help hit enrollment goals**.

The rest of this briefing is designed to facilitate productive cabinet-level discussions about aid strategy. A short list of dos and don'ts below is the preface for two remaining sections:

## Dos and Don'ts for Productive Cabinet Discussions on Aid Strategy

### Dos

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- 1 Think of aid strategy as a tool to be employed to hit enrollment goals.
- 2 Begin the conversation by agreeing on enrollment goals. Without agreement on goals, additional conversation will be unproductive. Clearly articulate these goals to the enrollment team for execution.
- 3 Assess how well the aid policy is designed to meet enrollment goals (this will require input from the enrollment manager or someone close to the data).
- 4 Ensure the enrollment team feels it has the resources to meet the thresholds for strategic use of aid presented in this briefing.

### Don'ts

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- 1 Don't think of aid (or discount rate) as an expense to be minimized.
- 2 Don't focus on philosophical questions in the context of aid strategy discussions. Philosophical questions should be addressed in the enrollment goal-setting stage.
- 3 Don't make assumptions about the effectiveness of aid strategy. Use data supplied by your enrollment team to make an empirical judgment.
- 4 Don't assume the enrollment team is appropriately resourced to execute strategic deployment of institutional aid.

# 2 The Mechanics of Aid Optimization

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Understanding the fundamentals of how aid optimization allocates aid to students in accordance with the university's goals

# Discounting: A Simple Example

## How Discounts Increase Revenue...to a Point

The fundamentals of discounting, demonstrated in the table below, are straightforward. In three scenarios, the college with a list price of \$10,000 offers different amounts of aid to all 100 admitted students. If the college offers no aid, relatively few students enroll. If it offers \$2,000 to each student, significantly more students enroll. If it increases that amount to \$5,000, more students enroll, but these additional students do not offset the higher outlay of aid. For every group of students at every college, there is a sweet spot of aid that generates more tuition revenue than more or less aid would.

	Scenario A	Scenario B	Scenario C
List Price	\$10,000	\$10,000	\$10,000
Admitted Students	100	100	100
FA Awarded	\$0/student	\$2K/student	\$5K/student
Net Price/Revenue	\$10,000	\$8,000	\$5,000
Enrolled Students	15	30	40
Total NTR	\$150,000	\$240,000	\$200,000

## Price Discrimination Is the Key to a High-Fixed-Cost Business

"College tuition discount rates are increasing because many colleges have spent the last several decades getting better at price discrimination. Like airline seats, spots in traditional residential college classes are finite and expensive....Like airlines, colleges don't want to sell each student slot for the same market price. Instead, they want to find the rich student with her heart set on that college and charge her parents a lot of money, then find the next person on the demand curve, and the next. So they set tuition high and start discounting."

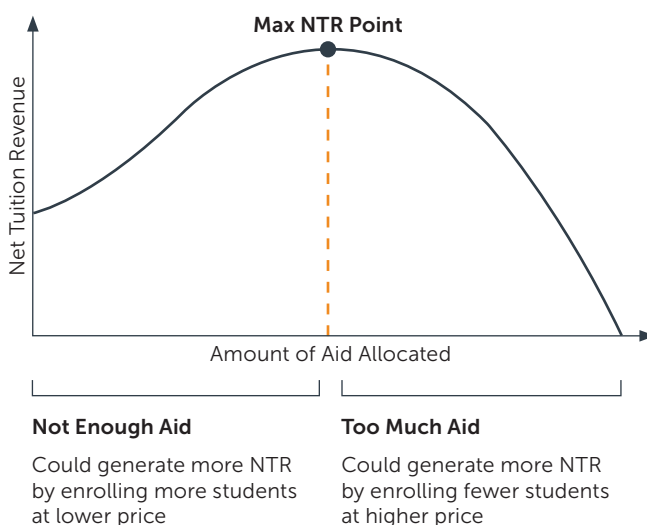
**Kevin Carey**

*The New York Times*, May 2017

# 'What Size Discount?' Is the Critical Issue

## Difficult to Pinpoint How Much Aid Is Enough but Not Too Much

The concept of aid optimization is represented graphically below. As the amount of aid increases (x-axis), net tuition revenue (y-axis) also increases—up to a point. Beyond this point, the point of maximum net tuition revenue, the allocation of additional aid decreases net tuition revenue. Several elucidating features of this revenue curve are called out below.



### Key Features of the Revenue Curve

- **Difficult to Identify Max NTR Point:** It's hard to know where your university falls on the curve without a statistical model.
- **The Curve Is Fractal:** It reflects the average reality for the overall student population as well as the realities for different sub-groups of students.
- **Stakeholders Often Misperceive Location on Curve:** Most leaders assume that the college allocates too much or too little aid.
- **Maximum NTR Not the Only Goal:** An institution is not likely to be trying to maximize NTR for every population of students. Diversity, academic profile, balance across disciplines, etc. are all also important goals.



# Three Components of Aid Optimization

## Goals Guide Priorities; Policy Specifies Allocations; Model Projects Results

Conducting aid optimization properly involves the three components described briefly here and in detail over the coming pages.

### 1 Set Enrollment Goals

The university must be clear about enrollment goals. These goals must be specific, guide trade-offs as the university sets aid policy, and have clear timelines.

**“What enrollment (headcount, mix of students) are we aiming for?”**

- Commits to specific enrollment priorities
  - Guides trade-offs in aid allocation
  - Sets time frames for realization of goals
- .....

### 2 Develop Aid Policy

The university must develop an aid policy that helps it achieve its enrollment goals. The aid policy should delineate criteria for need and merit aid.

**“How much aid will each student receive, based on need and academic performance?”**

- Details qualifying criteria for need or merit aid and specifies amount to be awarded
  - Based on EFC, academic ability, and residency
  - Tested against the statistical model to project hypothetical enrollment outcomes
- .....

### 3 Employ a Statistical Model

The statistical model allows the university to test hypothetical aid policies and project the enrolled class that would result from each.

**“How might our class look if we apply [any given] aid policy?”**

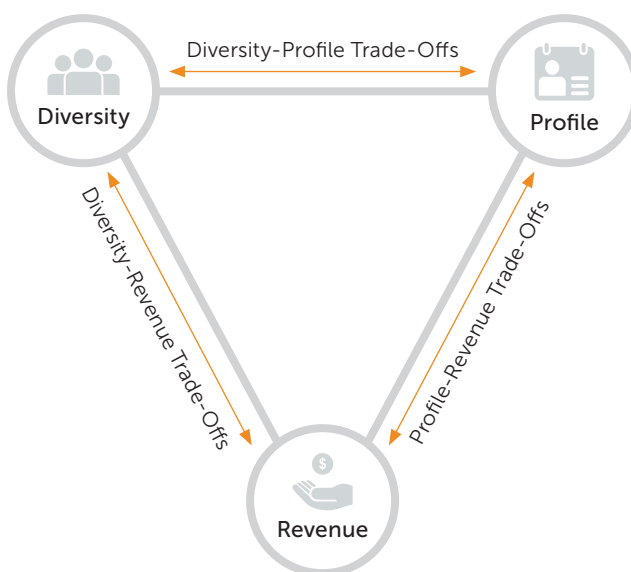
- Analysis of admitted-student data to predict yield
- Based on historical yield data
- Includes not just EFC and preparedness, but up to 200 variables that impact yield
- Variables used exclusively to project outcomes of policy, not to package aid

# Iron Triangle of Enrollment Illustrates Revenue-Profile-Diversity Trade-Offs

## Contradictory Objectives Underscore Importance of Explicit Prioritization

Enrollment managers often talk about the iron triangle of enrollment management, i.e., that three core enrollment goals are often at odds with one another. The challenge is that many low-income and underrepresented students are clustered in under-resourced high schools; therefore, recruiting a more diverse student body often involves accepting a slightly lower academic profile or allocating more aid. Since recruiting the highest-ability students of any admit pool requires allocating more aid, making progress on any one of these goals often involves making sacrifices on the other two. Under the right circumstances, universities might make progress against any two or even all three of these goals simultaneously—but such a situation is more the exception than the rule.

### The Iron Triangle of Enrollment Goals



## Explicitly Prioritizing Key Trade-Offs Key to Goal-Setting Success

In setting enrollment goals, the enrollment team must make it clear to senior leadership how different goals potentially conflict. Senior leaders must then determine the relative importance of goals and their associated trade-offs.



### Tuition Revenue

- How essential is the tuition revenue target?
- If the university missed the revenue target but hit all its other targets, would this be acceptable?



### Headcount

- Is the headcount target more important than the revenue target?
- If the university could enroll more students but generate less revenue, would that be desirable?



### Diversity

- Does the university have diversity targets?
- Is the university willing to trade academic profile and/or revenue to enroll a more diverse class?



### Academic Profile

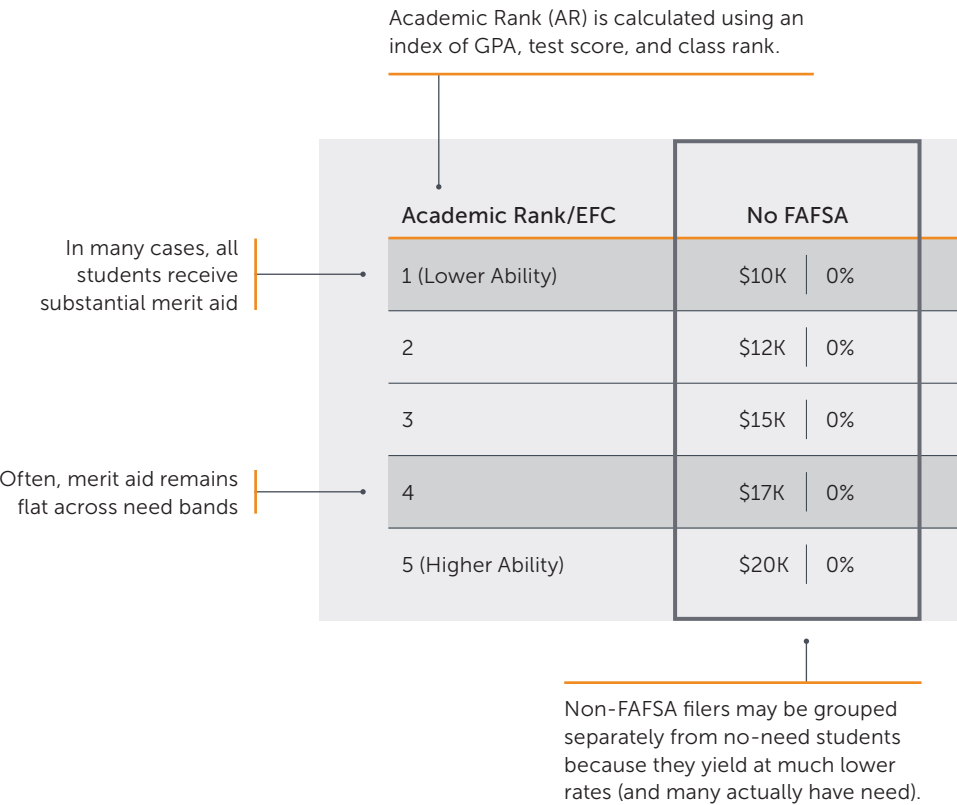
- How much revenue is the university willing to forgo to enroll more high-ability students?
- Is it more important to enroll more high-ability students or improve diversity?

# Aid Policy Determines Discounts for Every Student

## Illustrative Formula for Determining How Much Aid Each Student Receives

The policy for institutional aid, often referred to colloquially as “the matrix,” codifies how the university allocates institutional funds to admitted students. Universities bucket students by academic ability and need. Academic ability is measured using an index of GPA, test score, class rank, and potentially other measures of academic performance. Need is determined from the FAFSA. For each bucket of students, the university allocates a merit aid award and meets a percentage of need. An illustrative matrix is depicted below.

### Illustrative Aid Policy Matrix



## Two Common Methods for Differentiating Aid by Population

Net tuition revenue is never the only goal, so some universities have built other enrollment goals into their aid-awarding mechanisms. This is generally accomplished in one of two ways.

- 1 Add points to the academic rank index based on certain characteristics (e.g., first-generation status). This boost gives added merit aid dollars to high-priority students.
- 2 Design an entirely different matrix with bigger or smaller awards for different student populations. This is most commonly employed for specific colleges with high demand (e.g., engineering) within a broader university.

In each bucket, students receive a merit scholarship and have a percentage of need met.

\$0 Need		\$1–\$10K of Need		\$10–\$25K of Need		\$25K+ of Need	
\$10K	0%	\$10K	55%	\$10K	55%	\$10K	55%
\$12K	0%	\$12K	55%	\$12K	55%	\$12K	55%
\$15K	0%	\$15K	60%	\$15K	60%	\$15K	60%
\$17K	0%	\$17K	65%	\$17K	65%	\$17K	70%
\$20K	0%	\$20K	70%	\$20K	75%	\$20K	75%

Many private universities meet more need for higher-ability students; some place a special focus on the highest-ability low-income students.

# Four Questions to Determine Optimal Aid Allocation

## Any Good Statistical Model Must Be Able to Answer These Questions

Regardless of whether the statistical model is built in-house or outsourced to an aid optimization vendor, the statistical model should answer these four questions:

### **1 What is the yield rate for every type of award—for each targeted group?**

Without knowing the yield rate for each type of award (merit, scholarship, and need), it is nearly impossible to answer any questions about whether the policy is working overall and where it may be stronger or weaker at delivering on goals.

### **2 How do our scholarship yield rates compare to last year's?**

It is important to know where yield rates are falling—these are areas where the aid policy is failing to keep pace with those of your competitors. The more competitive the market, the more critical the answer to this question is.

### **3 How will small changes in scholarship size impact yield?**

The ability to project the effect of small changes in scholarship size is the core feature of any predictive model. Otherwise, the university will be incapable of identifying the most effective aid policy for its enrollment goals.

### **4 How will the pool of admitted students change next year?**

Any model will be based on static assumptions about the pool of admitted students. If you are predicting changes to the pool—for example, due to competitive or demographic shifts in the market—you must be able to adjust the model to reflect those shifts in advance.

# Assessing Your Institution's Opportunity

## 6 Institution-Specific Factors Impact Results of Adopting Optimization

EAB has identified six factors to evaluate the potential benefits of aid optimization for any particular institution. The more the six factors below describe the situation at your university, the greater the likely gains from aid optimization. Use the arrows at the right to estimate your university's opportunity on the given criterion.

Institutional Characteristics Impacting Optimization	Notes About How Each Criterion Impacts Opportunity for ROI <sup>1</sup>	Opportunity Rating ▼ ↔ ▲
Extra Capacity	With extra capacity, universities can allocate more aid and generate more revenue by growing headcount.	
Low Yield Rate	Universities with high yield rates have little room to make gains with more discounting—they're already enrolling many of their admitted students.	
High List Price	A high list price gives universities more room to use aid to create a variety of different price points.	
Natural Out-of-State Magnet	For publics, the more OOS students they can enroll, the greater the opportunity for discounting.	
Autonomy	Universities with more autonomy to set price and allocate aid without interference from the state have greater opportunity for ROI from optimization.	
New to Optimization	The less strategic the university is already with aid allocation, the more room there is to improve.	

High frequency of up arrows suggests greater opportunity for aid optimization improvement.





# 3 Self-Assessment of Aid Allocation

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18 questions about aid allocation enrollment  
leaders should be able to answer and use to  
guide discussions with the cabinet

# Self-Assessment of Aid Strategy

Based on the previous section, “The Mechanics of Aid Optimization,” EAB has designed a short self-assessment. The self-assessment asks enrollment leaders to answer a series of yes-no questions about the university’s aid allocation. Enrollment leaders should raise any concerns identified by the self-assessment to the cabinet.

	Yes	Somewhat	No	Don't Know
<b>Enrollment and Financial Aid Strategy</b>				
Our institution has specific enrollment goals.				
Our enrollment goals are prioritized in such a way as to guide trade-offs for limited resources (aid, recruitment efforts).				
Our aid allocation is aligned with our strategic enrollment goals.				
Regardless of accounting rules, the stakeholders who shape aid policy conceptualize aid more like a discount than like an expense.				
The stakeholders who shape aid policy understand the significance of the discount rate and could explain to a third party why it is at its current level.				
The stakeholders who shape aid policy understand the mechanics of financial aid optimization.				
<b>Aid Policy</b>				
Our institution has enough financial aid that net cost is not the primary barrier for non-enrolled students.				
We blend the overall proportion of merit and need aid differently across different target populations.				
When the chief enrollment officer has reasonable confidence that changing aid allocation would make progress against enrollment goals, he/she has the power to enact those changes.				

	Yes	Somewhat	No	Don't Know
<b>Statistical Model</b>				
We know last year's yield rate for every award type and every target population.				
We know how our yield rates (by award type and target population) have changed over the last three years.				
We can project how small changes in award size will impact yield for specific scholarships.				
We factor expected changes to population of admitted students (e.g., based on demographic shifts or competitor activity) into our statistical model each year.				
We can project the impact of aid awards on NTR across the 4–6 years the class is enrolled.				
<b>Aid Implementation</b>				
We proactively reach out to prospective students and families to educate them on the availability of aid.				
Most students receive aid awards within two weeks of receiving their letter of acceptance.				
In the award letter, aid awards are communicated together with information about the university's overall value proposition, i.e., why it's worth the cost.				
Admissions and financial aid functions are well coordinated.				

# Full-Scale Enrollment Support

Research has always been at the heart of EAB. Today, our approach to harnessing higher education best practices has three core tenets: investigation, insight delivery, and the ignition of transformative action on campus. **Enrollment Management Forum** does this exclusively for enrollment leaders to help them address their unique challenges.

Since complex problems require multifaceted solutions, we also apply these insights through a customized blend of technology and services. Our **Enrollment Services** offering, fueled by the market’s largest data asset, combines prescriptive analytics, smart recruitment marketing, and strategic advisory support to help colleges fulfill their enrollment mission.

Every day, we use data from 350+ clients, 1.5+ billion student interactions, and hundreds of research calls to give you real-time visibility into competitive market dynamics, shifting student trends, and proven practices so you can engage and enroll your most desired students.

## Your Enrollment Success, Powered by Enrollment Intelligence



1.5B+

Student interactions analyzed annually

100+

Data and analytics experts on staff to support EI

300+

Field marketing tests performed annually

7:1

Average ROI of EAB Enrollment Services clients



Visit us at [eab.com/services/enrollment-services](https://eab.com/services/enrollment-services)

# Financial Aid Optimization

EAB’s Financial Aid Optimization services ensure that your financial aid dollars help you achieve your enrollment goals—be they head-count growth, class mix, or increased tuition revenue. Because today’s students are discerning consumers who increasingly expect financial aid to both drive their college choice and bolster their “Return on Education,” our program is designed to help schools maximize their aid dollars to recruit their most sought-after students.

EAB’s dedicated in-house Financial Aid Optimization team works closely with your enrollment leadership, from the earliest stages of aid-policy development through to the final stages of yield management. Our statistical analyses are highly customized to each institution’s needs and transparent with respect to assumptions and methodology, and they enable real-time, live-model scenario testing.

EAB integrates your financial aid policy into its enrollment strategies and ensures that your policy can be refined throughout your recruitment season.

“Before, when families got a scholarship offer they said, ‘Thank you!’ Now they say, ‘Is this your best offer?’”

Director of Admissions  
Private Master’s College in the Midwest

## EAB’s Financial Aid Optimization program enables you to:



### Make the most of financial aid

Optimize your aid dollars to achieve your net tuition revenue goals within the parameters of your unique, strategic enrollment ambitions.



### Weigh tactical trade-offs

Balance the impact of different enrollment and revenue goals across academic programs, geographies, student profiles, and the like.



### See outcomes early

Enjoy early vision into the decisions of your admitted-student pool to enable mid-cycle refinement of your strategy.



### Understand the national market

Benefit from a nuanced view of national context, peer benchmarks, and emerging trends throughout the enrollment cycle.

## The Three Phases of EAB’s Financial Aid Optimization Program

Historical  
Data Analyses



Aid Policy and  
Model Development



Progress Monitoring  
and Triage

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Enrollment Management Forum Interviews and Analysis.



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