RNL Advanced Financial Aid Solutions for Undergraduate Enrollment: Leveraging Aid and Optimizing Yield

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RNLNC

1

The Need for a Complete Financial Aid Solution

Today's Higher Ed. Environment

Administrators balance several scenarios:

Student Financial Needs
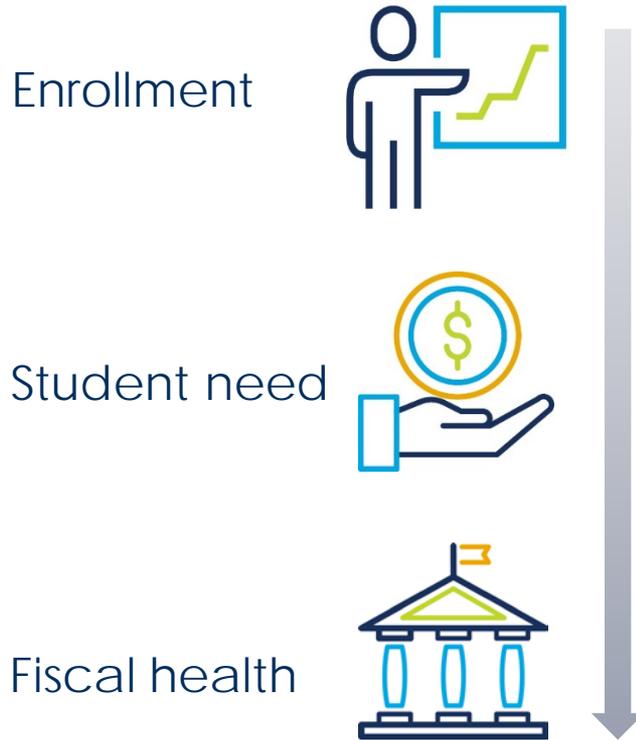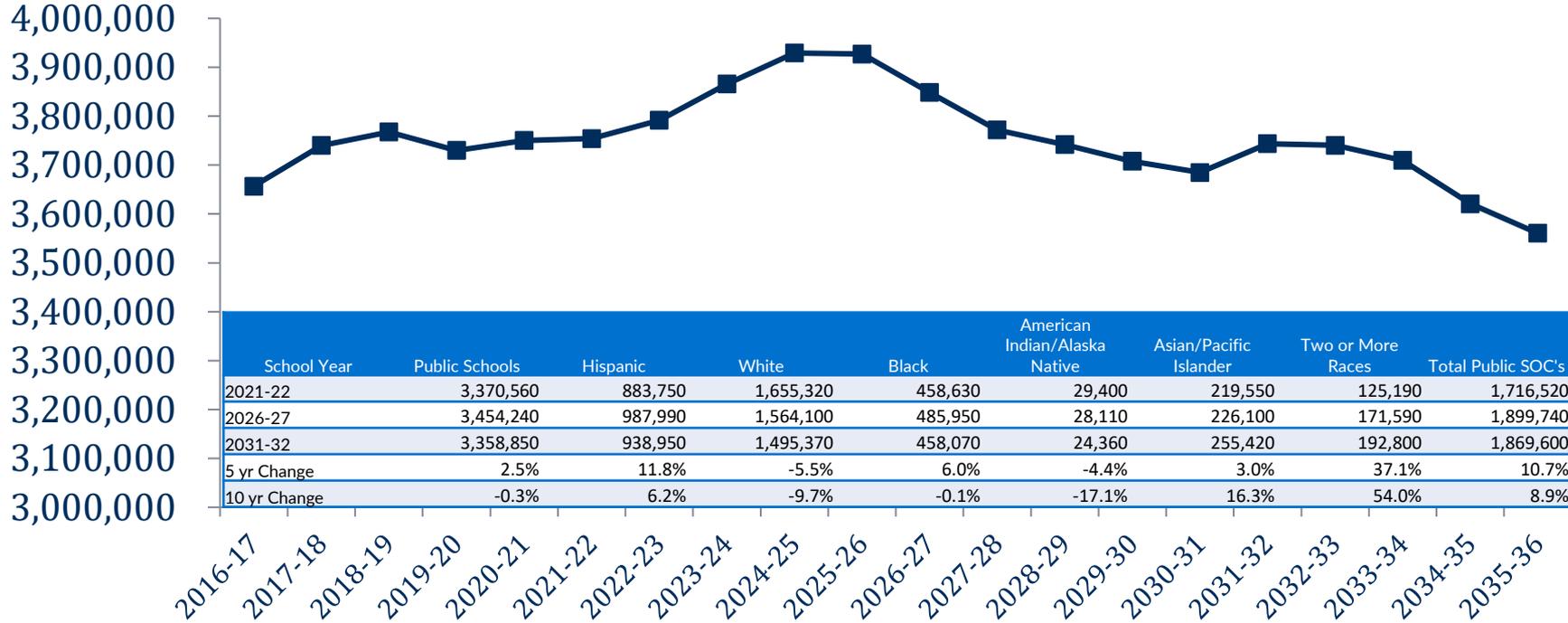
Institutional Fiscal Health

Enrollment Goals

What if you could align those scenarios?

Enrollment

Student need

Fiscal health

Everyone on the same page through sophisticated analysis, comprehensive, industry-leading statistical modeling, and a financial aid awarding plan responsive to a dynamic market.
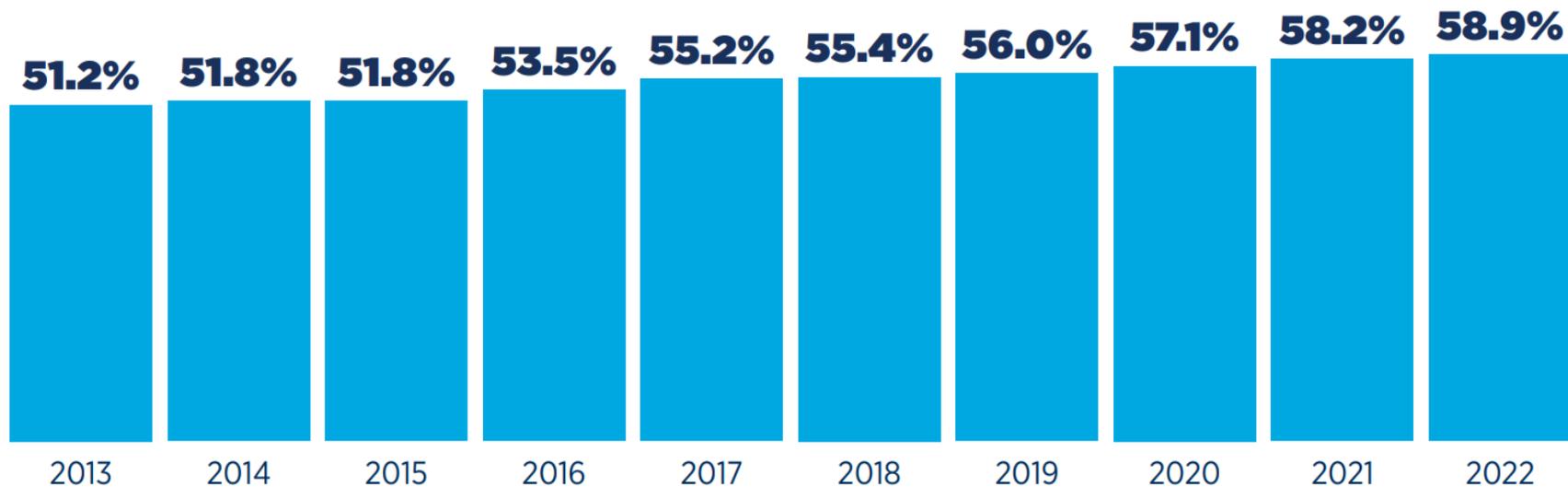
Projected Change in High School Graduates

United States 2017-36

School Year	Public Schools	Hispanic	White	Black	American Indian/Alaska Native	Asian/Pacific Islander	Two or More Races	Total Public SOC's
2021-22	3,370,560	883,750	1,655,320	458,630	29,400	219,550	125,190	1,716,520
2026-27	3,454,240	987,990	1,564,100	485,950	28,110	226,100	171,590	1,899,740
2031-32	3,358,850	938,950	1,495,370	458,070	24,360	255,420	192,800	1,869,600
5 yr Change	2.5%	11.8%	-5.5%	6.0%	-4.4%	3.0%	37.1%	10.7%
10 yr Change	-0.3%	6.2%	-9.7%	-0.1%	-17.1%	16.3%	54.0%	8.9%

Source: Western Interstate Commission for Higher Education, *Knocking at the College Door: Projections of High School Graduates, 2020, www.knocking.wiche.edu*

Private Four-year Institutions – First-year Students
Tuition and Fee Discounting Benchmarks: 10-year Trend

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
51.2%	51.8%	51.8%	53.5%	55.2%	55.4%	56.0%	57.1%	58.2%	58.9%

+0.7 point increase
in average tuition and fee discount rate

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NACUBO National Discount Rate vs. RNL Campus Partners

NACUBO Reports since 2019; Over a 4% discount rate increase

RNL's Campus Partners since 2019; Less than 3% discount rate increase

Key Outcomes of a Successful Aid Strategy

Enroll the students you want to enroll

Understand and manage your discount rate

Maximize net revenue and optimize yield
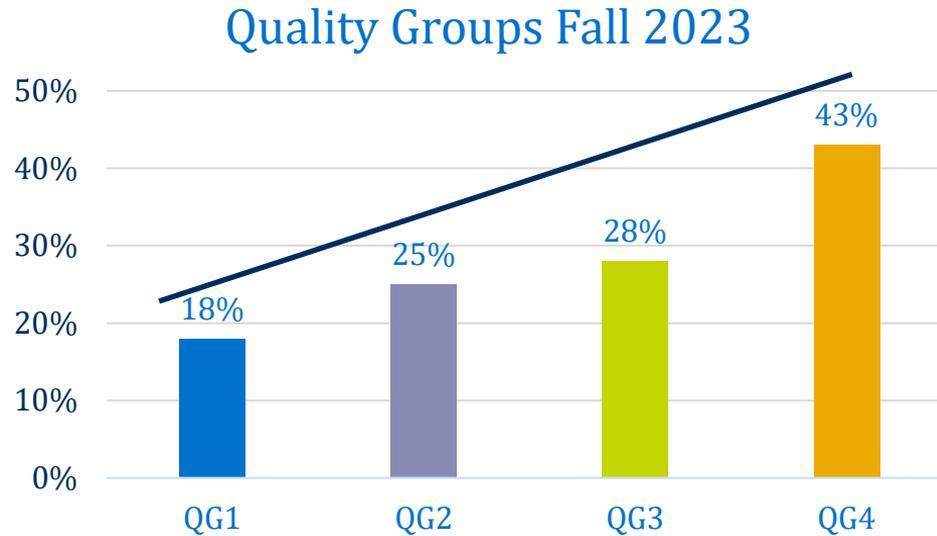
2

Strategic Financial Aid Concepts

Important Considerations

Three elements must be present for a student to enroll.

Students' ability to pay

+

Students' willingness to pay

=

Enrolled students

+

Strategic financial aid plan
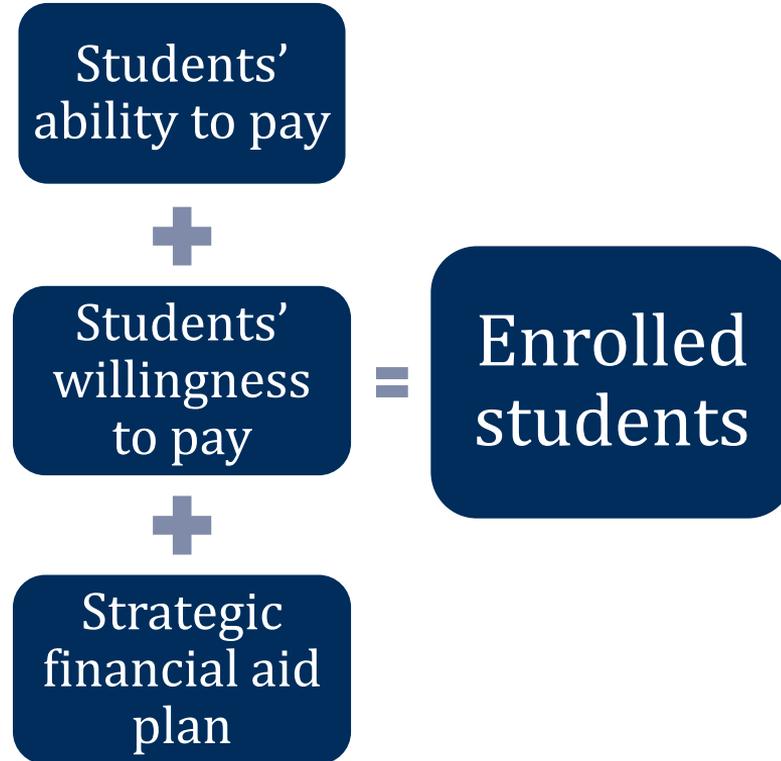
Quality Groups as a Proxy for Willingness to Pay

Total First-year Students

Quality Groups Fall 2023

Quality Group 1 (QG1) has the highest/strongest academic credentials

Academic Tiers as a Proxy for Willingness to Pay

First-year In-state and Out-of-state

Tier 1 has the highest/strongest academic credentials.
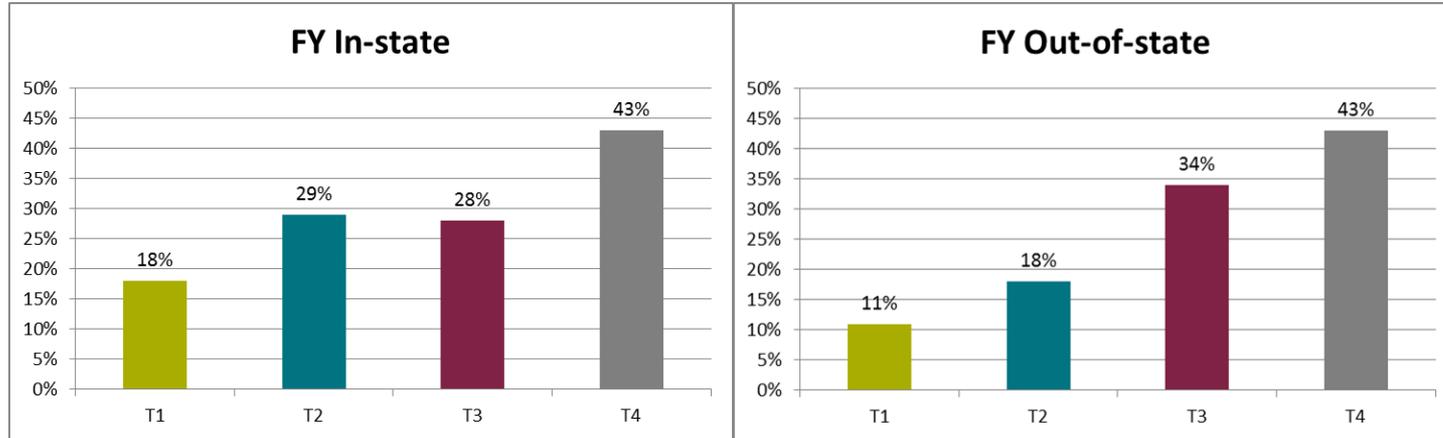
We typically test multiple measures of academic preparation/performance as well as various academic boundaries.
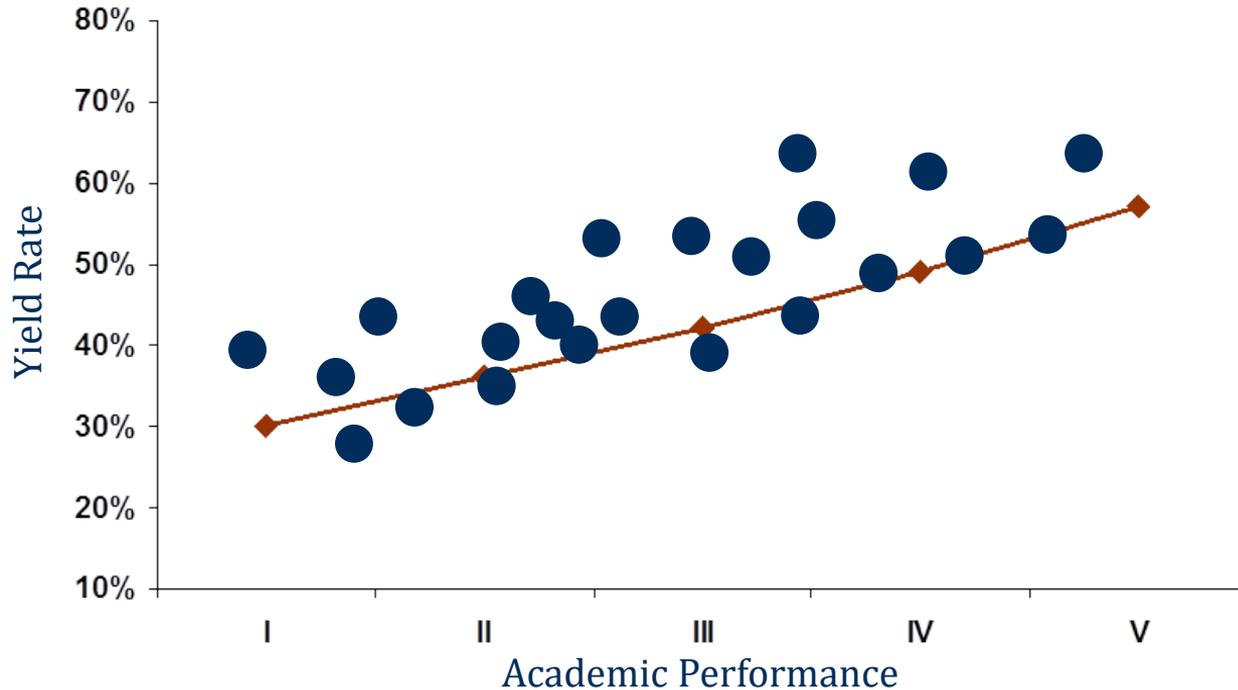
The Strategic Financial Aid Matrix

WILLINGNESS TO PAY
QUALITY METRICS

ABILITY TO PAY
NEED CRITERIA

Subpopulations are identified based on statistical analysis and your enrollment goals.

IN-STATE   OUT-OF-STATE   ATHLETES   TRANSFERS

TOTAL ENROLLMENT
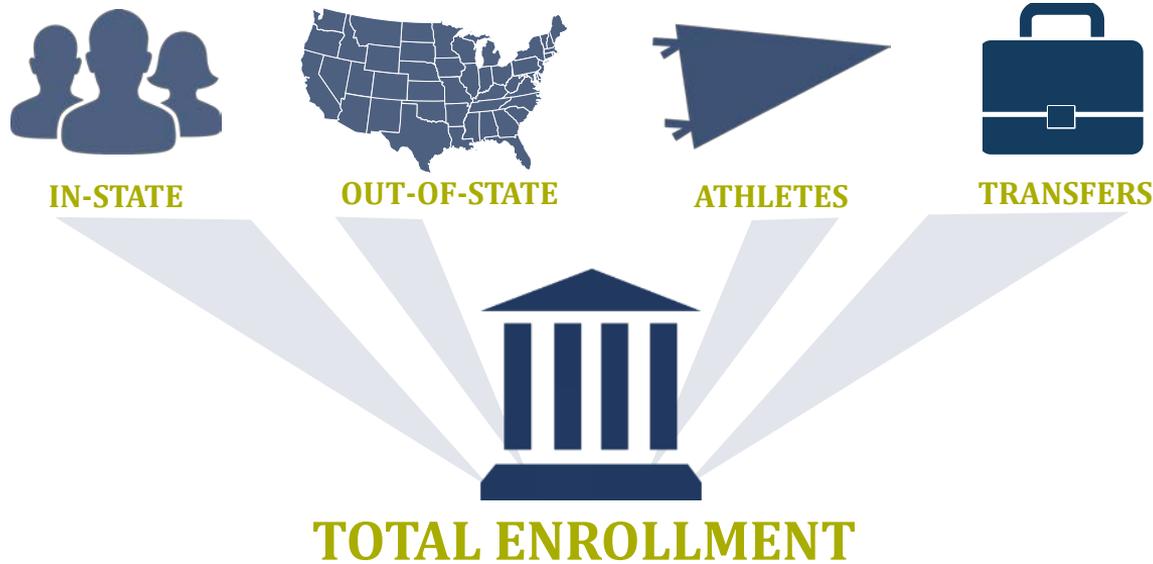
Key Metrics

✓ **Yield**
(and retention) rates by cell

✓ **Percentage of need met**
and need met with gift aid for need-based students

✓ **Yield by institutional gift**
offer for low-need and merit-aid-only students

Measuring price sensitivity of selected need-based students by *percentage of need met.*

Yield rates in selected cells of a client subpopulation.

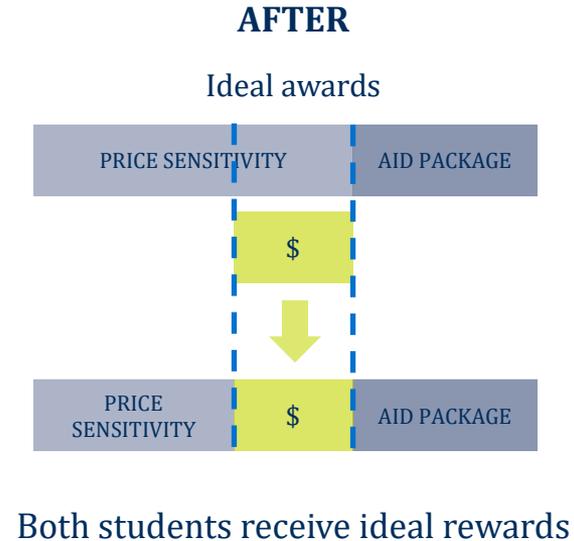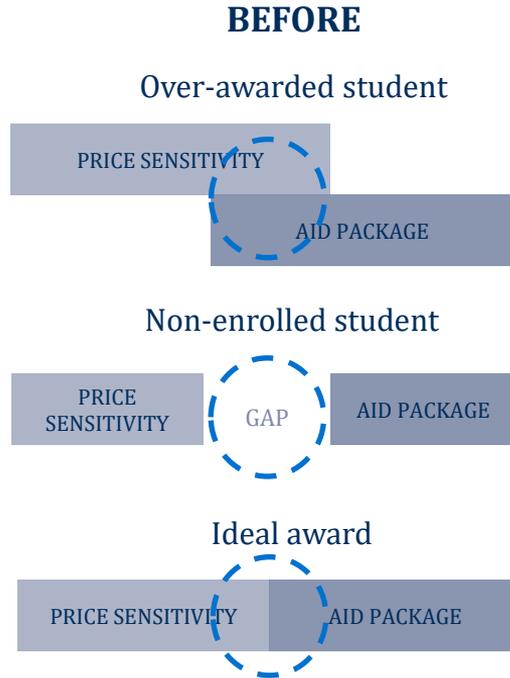| Need Met	Enrollment Rate	Number of Cases
<75.6%	25.9%	54 Cases
75.6%-87.0%	48.2%	83 Cases
>87.0%	49.2%	65 Cases
TOTAL	42.6%	202 Cases

Measuring price sensitivity of selected need-based students by examining the *percentage of need met with gift aid.*

Yield rates in selected cells of a client subpopulation.

Need Met w/ Gift Aid	Enrollment Rate	Number Of Cases
<53.16%	24.4%	78 Cases
53.16%-61.7%	47.9%	73 Cases
>61.7%	62.7%	51 Cases
TOTAL	42.6%	202 Cases

Measuring price sensitivity of selected merit-aid-only students by examining the *gift aid offer.*

Yield rates in low-need and merit-aid-only segments (ability level 3) of a client's first-year population.

Merit Offer	Enrollment Rate	Number Of Cases
<$3,000	6%	30 Cases
$3,000-$4,999	42%	53 Cases
$5,000-$6,999	60%	30 Cases
>$6,999	75%	12 Cases
Total	39.2%	125 Cases

What is the concept behind an effective financial aid strategy?

BEFORE

Over-awarded student

PRICE SENSITIVITY

AID PACKAGE

Non-enrolled student

PRICE SENSITIVITY — GAP — AID PACKAGE

Ideal award

PRICE SENSITIVITY — AID PACKAGE

AFTER

Ideal awards

PRICE SENSITIVITY — AID PACKAGE

$

PRICE SENSITIVITY — $ — AID PACKAGE

Both students receive ideal rewards

Leveraging Analysis

First-year Students

	HsGpa: 3.5 - 3.89	
	Enrolled	**Non-enroll**
FC: $0	**Cell 2**	
Number admitted	87	
Number enrolled/not enrolled	9	78
Yield / Yield change from 2021	10.3%	2.5%
Number offered aid	9	78
Average need	$38,600	$38,600
% of need met	76.1%	73.9%
% of need met with gift	66.0%	59.2%
Average award for those offered aid	$29,363	$28,518
Institutional gift	$13,617	$9,329
Total gift (excl. outside aid)	$25,474	$22,858
Total work and loan	$3,889	$5,660
Average net tuition revenue	$10,783	$15,071
Tuition & fee discount rate	55.8%	38.2%

Go

Enrolling Student Awards

Non-Enrolling Student Awards

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3

The Process

What to Expect:
Partnership Throughout the Process

RNL Advanced FinAid Solutions Partnership

A dedicated team of experts: Financial Aid Consultant, Campus Partner Liaison, Client Data Onboarding Specialist

How RNL Helps You Enroll the Students You Want to Enroll

Analysis, Modeling, and Strategy

True Cost Calculator

Historical Analysis

Predictive Modeling

Strategy Development

Retention Analysis

RNL TrueCost Calculator™

High School Students rank NPCs as essential in their college search.

⌄

Make your calculator work for you.

Step 1: Historical Research and Competitor Benchmarking

Analysis

Will show student price sensitivity and identify areas of opportunity.

Enrollment

Understand students' enrollment behavior as it relates to their need, academic credentials, population segment, and financial aid offers.

Historical Visit

Historical findings will be presented during an on-campus consultation to inform strategy development.

Step 2: Retention Analysis

Impact of financial aid policies on persistence.
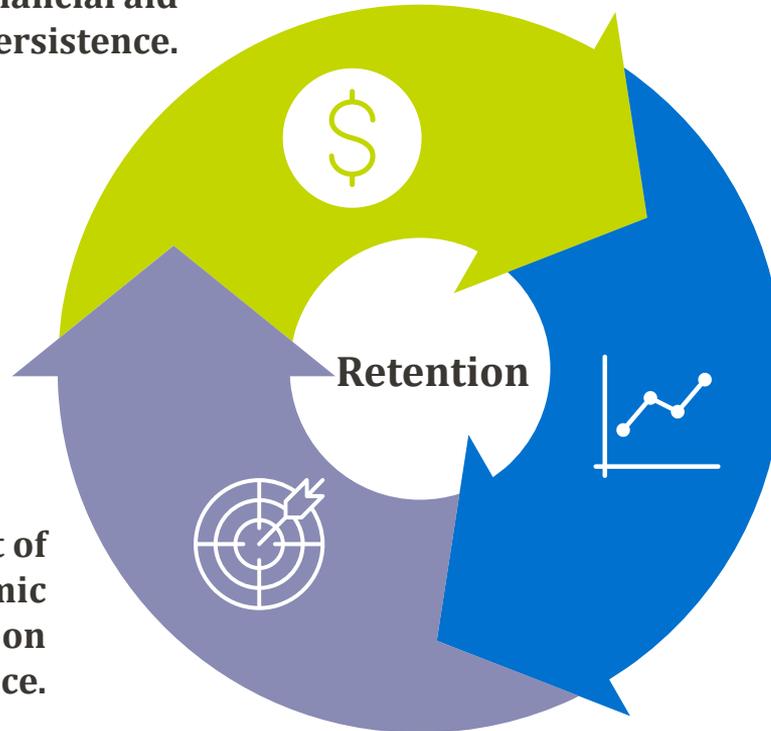
Retention

Is there a threshold of aid below which retention is unlikely?

Isolates the impact of financing and academic preparation on persistence.

Retention Analysis Benefits

Informing Your Financial Aid Strategy

Measure fall-to-spring and fall-to-fall rates to the cellular levels:

- Allows you to identify and focus on specific populations.
- Are there any pockets that need special attention?

Retention rates by need level and academic rating:

- Measure the impact of awarding strategy.
- Impact of financing and academic preparation on persistence.

Understanding impact of aid award package composition:

- Focus on retention of specific students.
- Identify threshold of aid below which retention is unlikely.

Step 3: Econometric Modeling

Modeling Price Sensitivity and Student Enrollment Behavior

Advanced Machine Learning Models

Two years of Historical Data

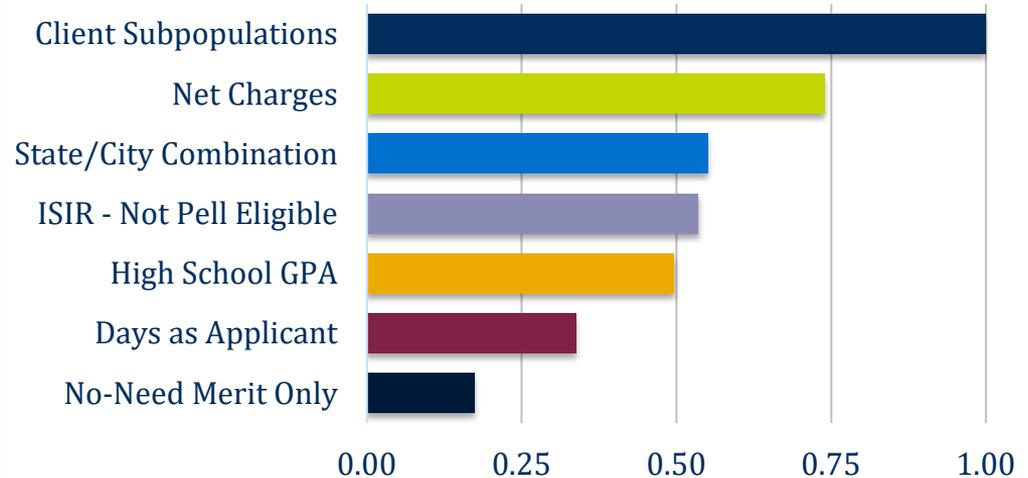Measure the impact of aid on student's ability to enroll

Determine other factors predictive of enrollment

Relative Importance of Variables

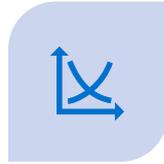| Variable	
Client Subpopulations	1.00
Net Charges	0.74
State/City Combination	0.55
ISIR - Not Pell Eligible	0.53
High School GPA	0.50
Days as Applicant	0.34
No-Need Merit Only	0.17

0.00   0.25   0.50   0.75   1.00

Econometric Modeling

GRADIENT BOOSTING

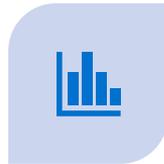**SUPPORT VECTOR MACHINE**

ADAPTIVE LASSO

ENSEMBLE

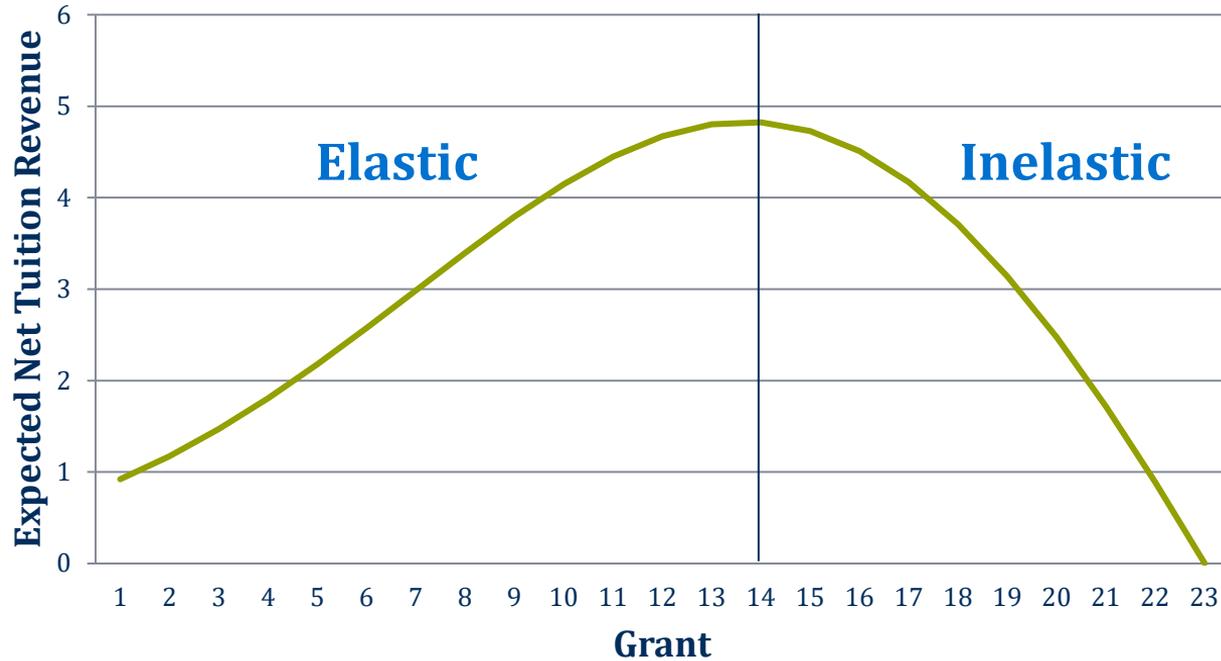**NEURAL NETWORK**

LOGISTIC REGRESSION

86.8% of campus partners had a champion model other than logistic regression.

The "tournament" approach allows your data scientist to identify the most predictive modeling technique for your campus based on your data.
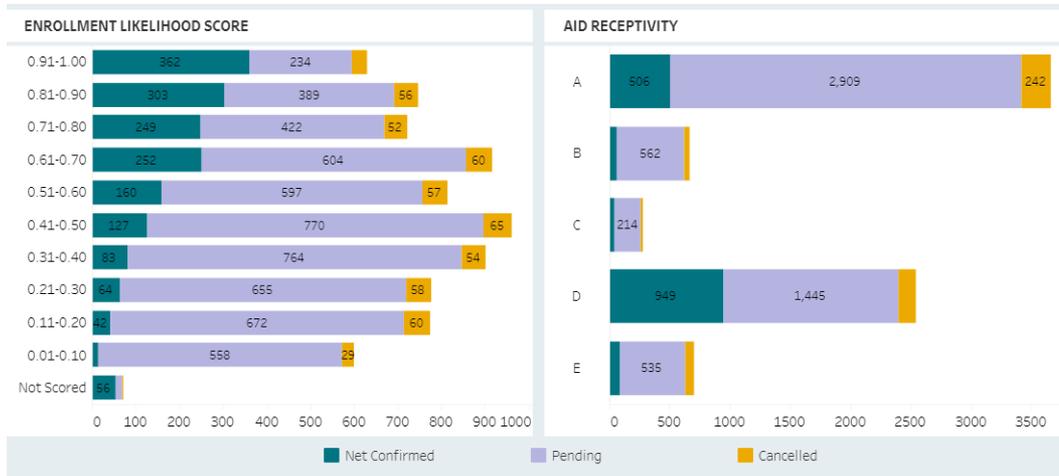
Price Elasticity

Describes Tuition Revenue-Generating Opportunities

FinAid Scoring
Analyzing Current Class Behavior on the Fly

ENROLLMENT LIKELIHOOD SCORE

Score	Net Confirmed	Pending	Cancelled
0.91-1.00	362	234	
0.81-0.90	303	389	56
0.71-0.80	249	422	52
0.61-0.70	252	604	60
0.51-0.60	160	597	57
0.41-0.50	127	770	65
0.31-0.40	83	764	54
0.21-0.30	64	655	58
0.11-0.20	42	672	60
0.01-0.10		558	29
Not Scored	56		

AID RECEPTIVITY

	Net Confirmed	Pending	Cancelled
A	506	2,909	242
B		562	
C	214		
D	949	1,445	
E	535		

Legend: ■ Net Confirmed ■ Pending ■ Cancelled

ENROLLMENT LIKELIHOOD SCORE

AID RECEPTIVITY
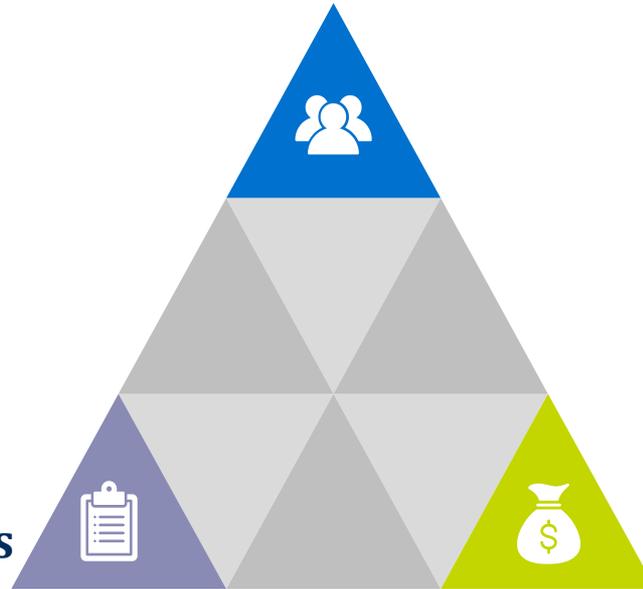
ELASTICITY

CHANGE EFFECT

FINANCIAL AID AWARD

PROBABILITY

Step 4: Optimization and Simulation

Optimizing enrollment estimates based on variations of these three variables and actual results from the most recent academic year.
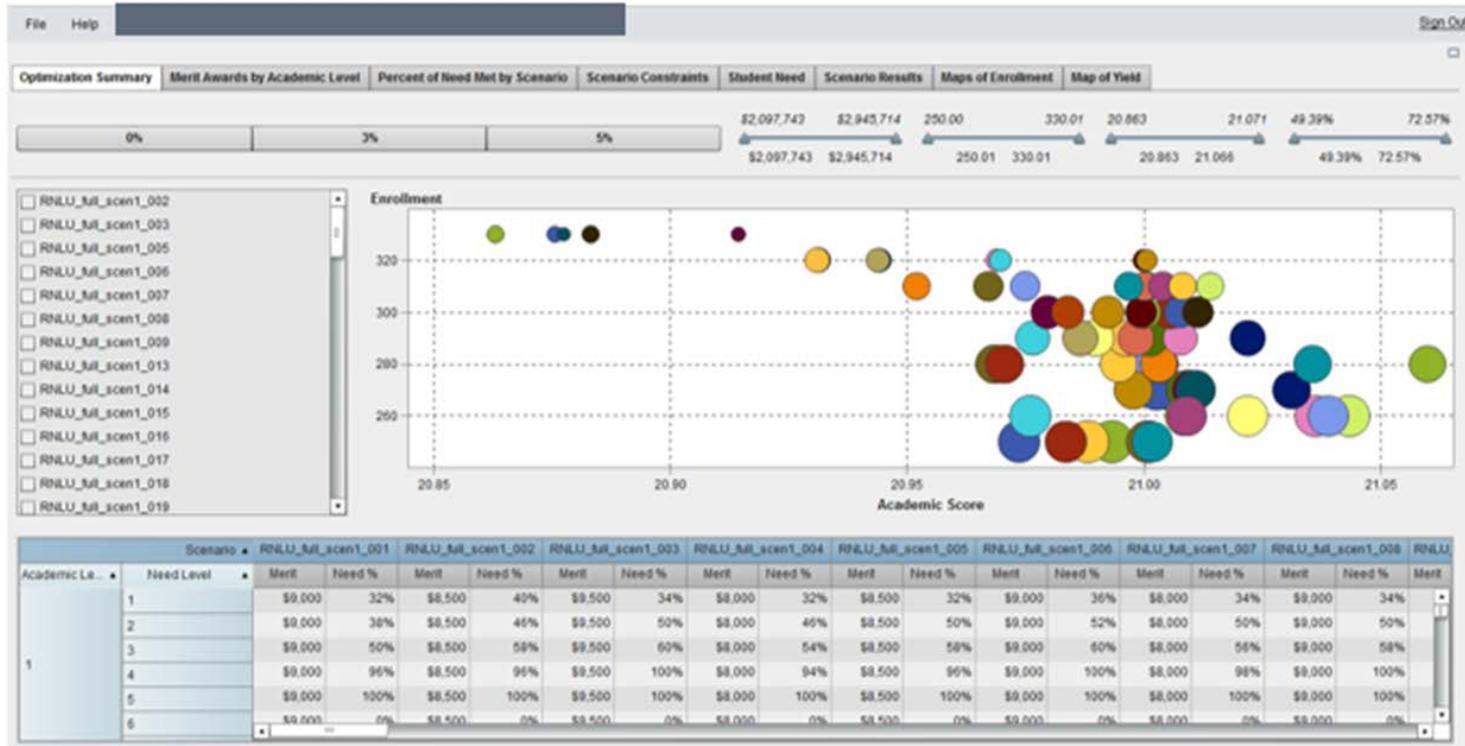
Enrollment Headcount

Quality/Credentials

Finances
(Net revenue/discount rate)

34

Optimization and Simulation Provides Multiple Scenarios to Maximize Revenue

Step 5: Annual Plan Development

Goals - Establish Institution-Specific Goals

POPULATIONS GOALS
- Admits and enrolled
- Discount rate
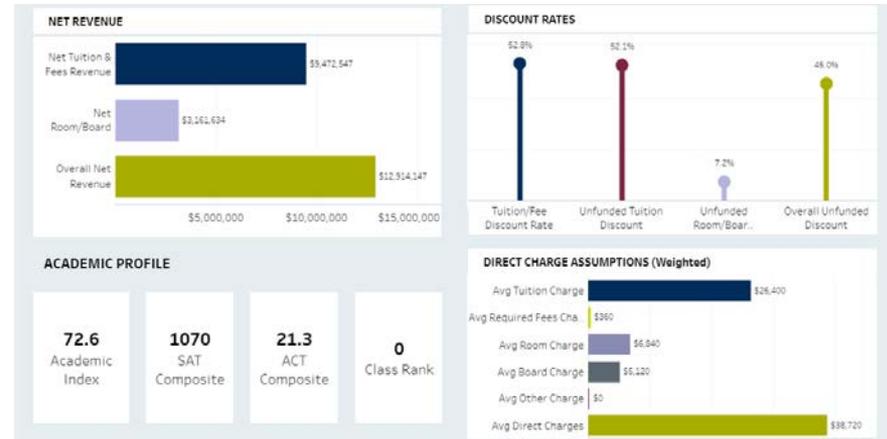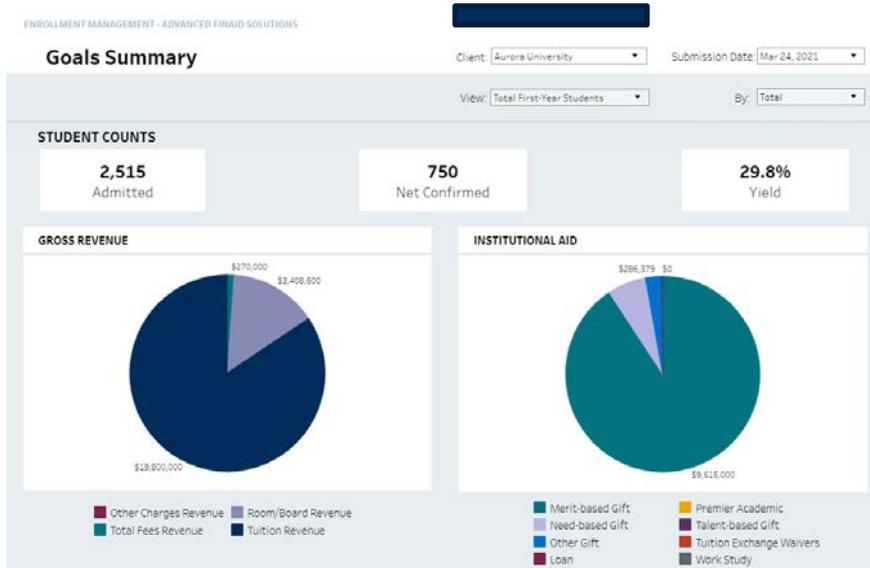
QUANTIFY THE COST
- Merit-based gift
- Need-based gift

IDENTIFY OPPORTUNITIES
- Cellular analysis
- Procedural analysis
- Model simulations

Annual Plan Development

A comprehensive aid strategy may have "buckets" of dollars that "roll-up" to provide a picture of anticipated results.

Step 6: Five-year Enrollment and Net Revenue Projection Model

Institutional Aid Planning

Targets base on enrollment, costs, aid, and net revenue.

Institutional Decision Making

Assists in planning for present and future campus housing needs, facility needs, and academic support based on potential changes.

Projected Enrollment and Revenue

Illustrates the impact of student persistence on overall revenue and net revenue.

Step 7: Tracking Reports and Ongoing Consultation

Institutional Aid Levels
Detailed evaluation

Net Revenue Goals
Discount rate tracking

Regular Tracking
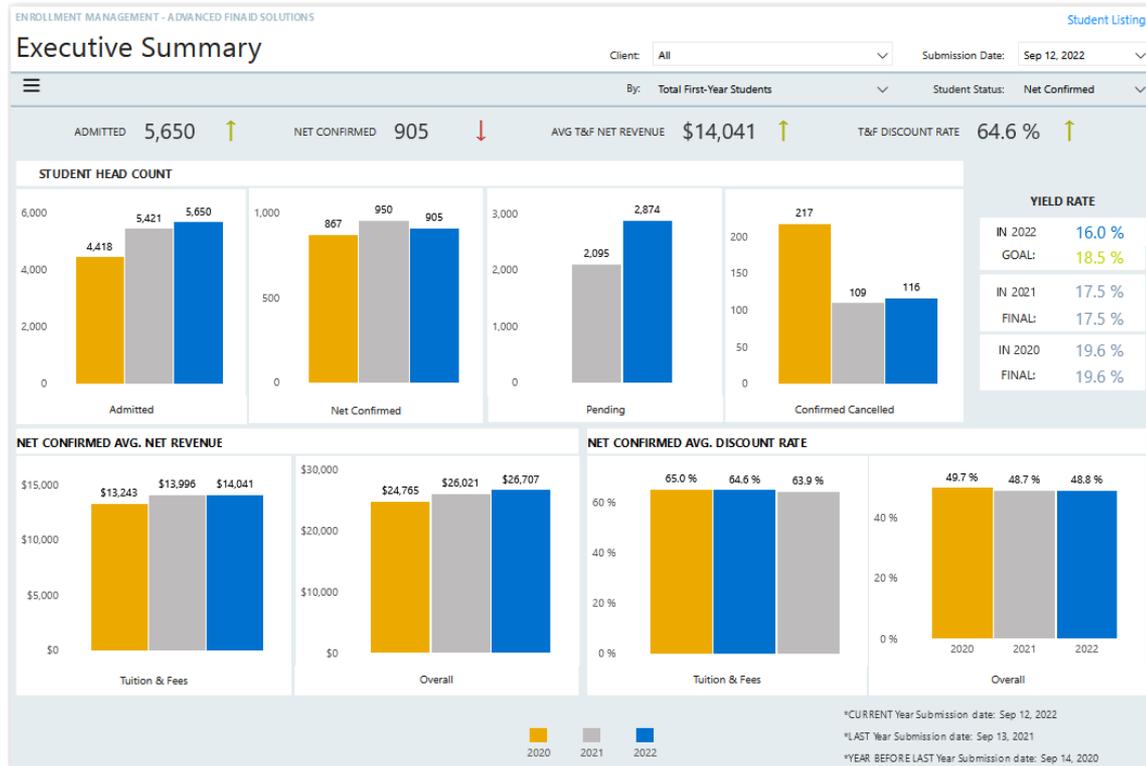Strategy development and implementation

Admit and Enroll Goals
Population assessment

RNL Smart View

Dashboards and Reporting Platform

Interactive Scoring Dashboard

How can aid impact yield and net revenue?

| Determine the students you want to impact yield | Simulate the amount of aid you would give pending students | See real time results if the increase would benefit your campus |

Increase Aid: 1,000	Model Score Bin: (Multiple values)	Receptivity Bins: A

Current Projected Enrollment	Current Projected Net Tuition Revenue	Change	New Projected Enrollment	New Projected Net Tuition Revenue
29	$298,605	4 Enr $7,784 NTR	33	$306,389

CURRENT PROJECTED INSTITUTIONAL AID	NEW PROJECTED INSTITUTIONAL AID
$79,599	$122,664

4

RNL Differentiators

RNL: Trusted higher education partner for 50 years

50 years

3,000+ campuses

~1/2 million applications per year

66,000 enrollments per year

Nearly $3 billion of financial aid managed per year

$1 billion raised from 10 million+ donors

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RNL Differentiators

24 Years Average Consultant Experience

Team Bench Depth

Proprietary Modeling Tools

FAS Benefits

Consistent packaging

Complete and accurate data

Modeling/Simulations

Informed decision making and strategy development

Long-term planning

Ongoing evaluation

Impact of aid on retention

The RNL "Bench": just a phone call away

Questions?

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