



Using Financial Aid Analytics to Overcome Enrollment Challenges

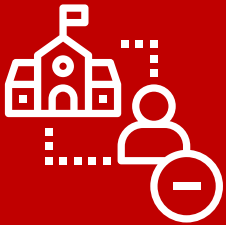


- ▶ Frostburg, MD
- ▶ Public, 4 year university
- ▶ 5300 students
- ▶ 88% Maryland residents
- ▶ Shift from traditional 18 year old to transfer student
- ▶ 42% students of color
- ▶ 77% freshman-to-sophomore retention rate



One University. A World of Experiences.

Challenges



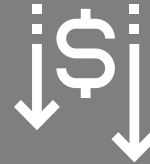
Declining
Enrollments



Yield
Declines



Financial
Aid



Decreasing
Revenue
Implications



Affordability

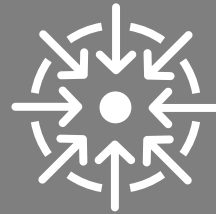
President's Perspective & Goals



What is important in an analytics initiative?



Transparency



Accessibility



Trust in the Data

Early Analyses



Identifying
enrollment
trends



Understanding
market
conditions and
competitive
landscape

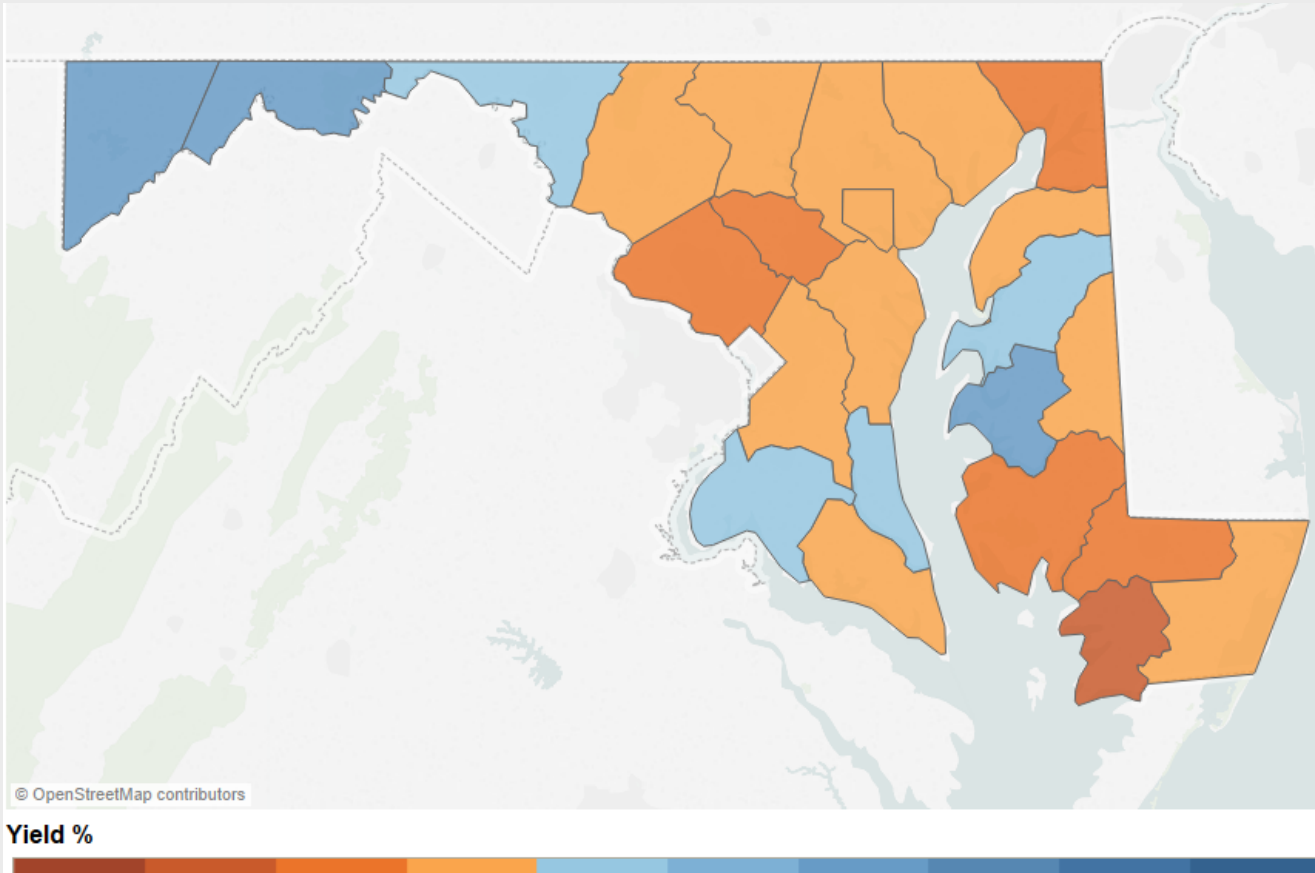


Identifying core
student type,
who actually
enroll at
Frostburg



Identifying
which students
graduate in
four years

Admissions Yield by County

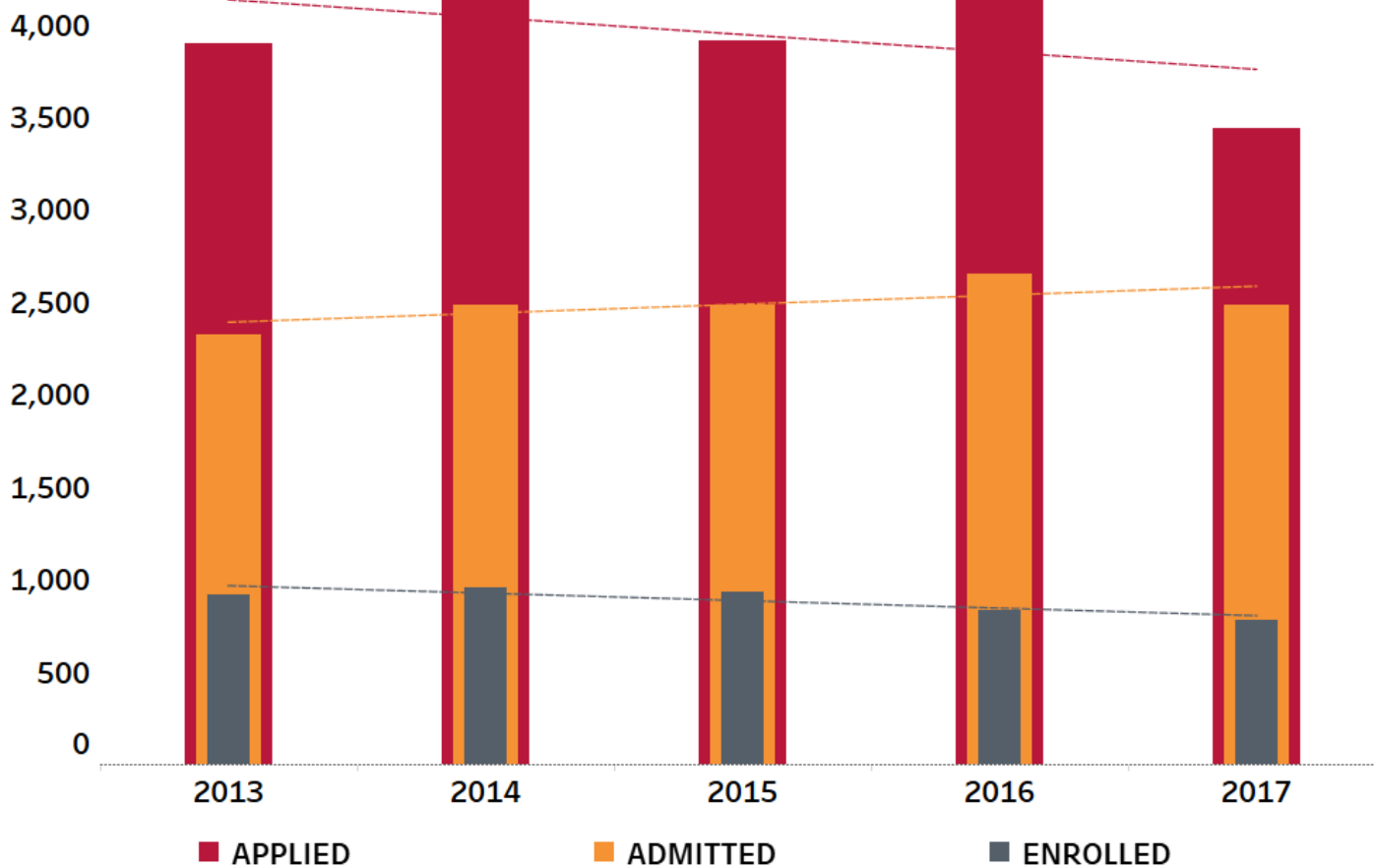


WHAT'S IMPORTANT?

- Local students yield highest
- Metropolitan areas yield lower
- Highest population densities in Baltimore/DC corridor

Admissions Funnel

FSU Admissions Funnel



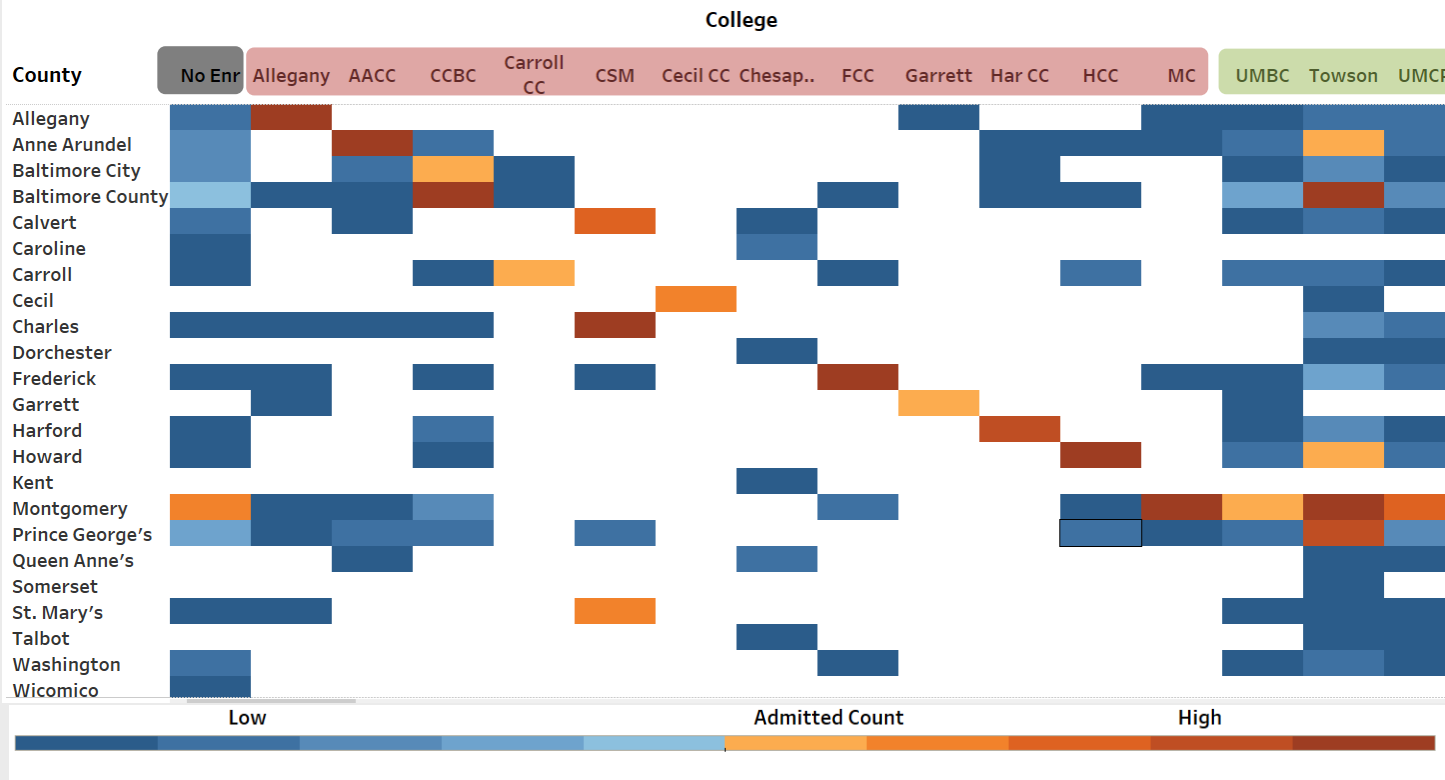
WHAT'S IMPORTANT?

- 2017 Declining applications
- Increasing admission rate
- Declining yield

Where Are Admitted Students Going?

WHAT'S IMPORTANT?

Key FSU Competitors, 2015-2017



- Community Colleges are the largest competitors to Frostburg
- Staying within home county and going to a Community College suggests financial reasons

Approach

1. How can we use financial aid strategically to increase yield and retention?
2. How does increasing total aid impact enrollment and net tuition revenue?

Goals for Using Financial Aid

1. Get more aid to more students to meet more need
2. Use institutional aid to reduce the financial burden on our core student
3. Have as many of the likely-to-graduate receive some type of aid
4. Want to get to the point where we are not leaving money on the table

Changes to Key Scholarship & Grant Offers

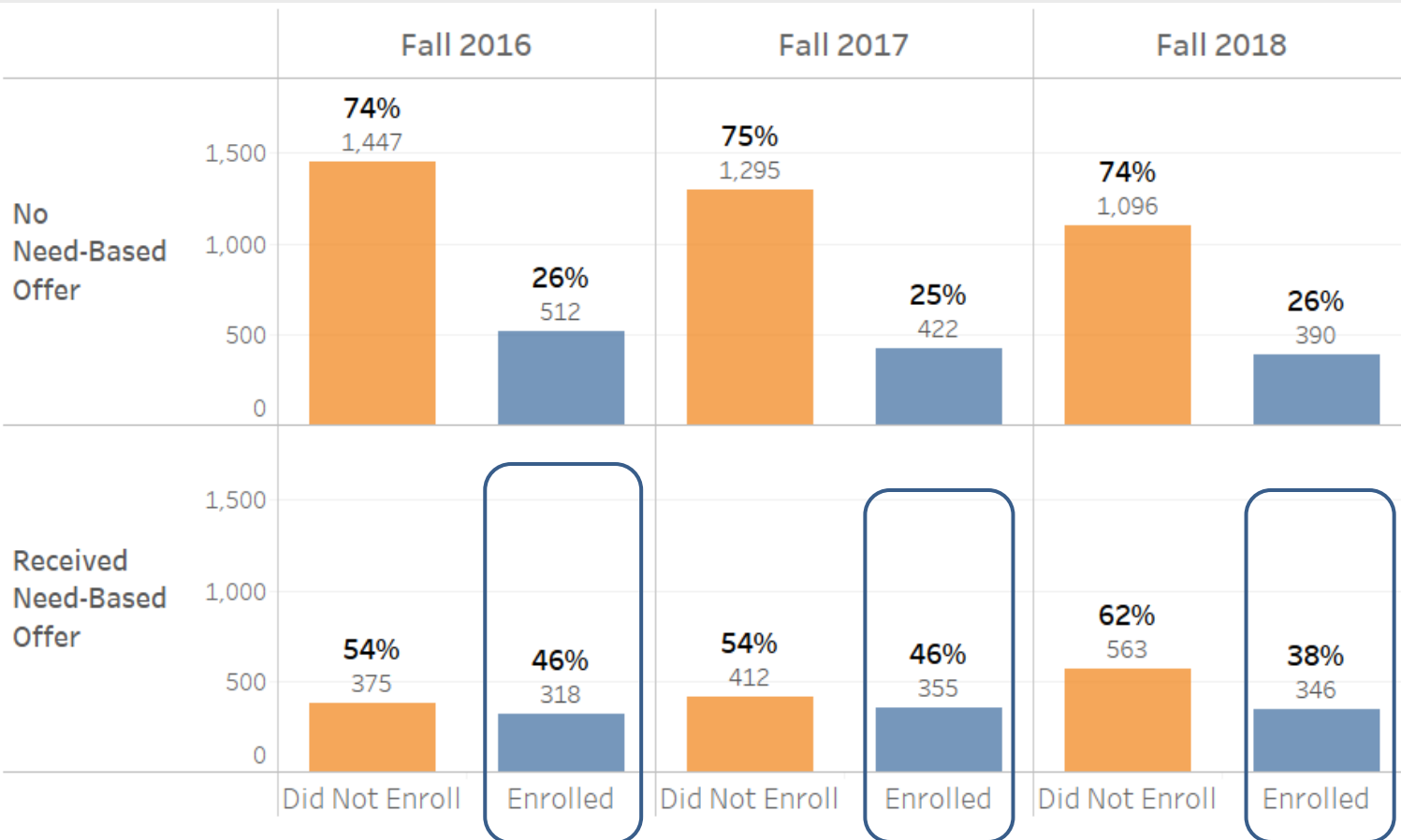
Scholarships/Grants Most Frequently Offered

	Fall 2017					Fall 2018				
	Students Offered Aid	Students Offered Inst Aid And Enrolled	Percent Offered Aid And Enrolled	Median Inst Offer Amount	Max Inst Offer Amount	Students Offered Aid	Students Offered Inst Aid And Enrolled	Percent Offered Aid And Enrolled	Median Inst Offer Amount	Max Inst Offer Amount
Need-Based Offers	648	254	39%	\$2,300	\$4,000	904	346	38%	\$2,300	\$3,400
FSU Acad Need Scholarship	104	39	38%	\$1,000	\$1,000	74	20	27%	\$1,000	\$1,000
FSU Distinction	102	31	30%	\$5,000	\$5,000	112	28	25%	\$5,000	\$5,000
FSU Excellence	255	73	29%	\$3,250	\$3,250	285	92	32%	\$3,250	\$3,250
FSU Honor	592	167	28%	\$1,000	\$1,000	614	171	28%	\$1,000	\$1,000
Out-of-State Scholarships	74	25	34%	\$4,000	\$6,000	60	16	27%	\$4,000	\$6,000
Summit Scholarship	67	15	22%	\$5,000	\$10,000	88	13	15%	\$5,000	\$10,000
Grand Total	1,495	475	32%	\$2,000	\$10,000	1,671	533	32%	\$2,000	\$10,000

WHAT'S IMPORTANT?

- Increase in the number of need-based offers (Frostburg Grant)
- Need-based aid seemed to have largest impact
- Static yield for merit-aid recipients

Admissions Yield & Need-Based Offers



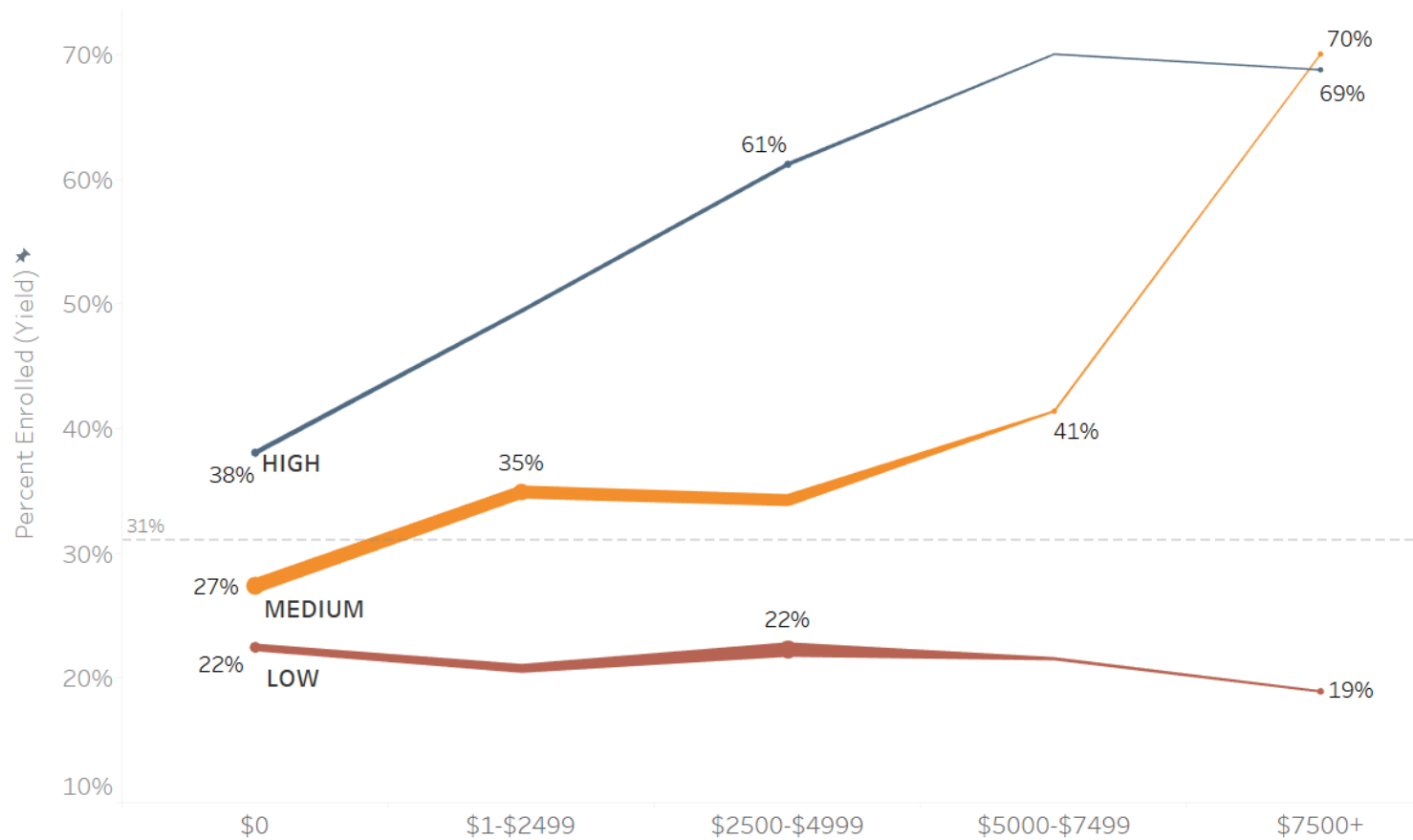
WHAT'S IMPORTANT?

- Yield increased when students were offered need-based aid
- Supports the idea that students are attending local CC's for financial reasons

How Should We Target Institutional Aid?

Yield Curve by Yield Class over Institutional Aid Offered

Groupings based on HS GPA, In/Out of State, and Campus Proximity.



WHAT'S IMPORTANT?

- Admitted students can be grouped into likelihood to enroll buckets independent of financial aid offer
- Varying FA offers impact each buckets yield – Medium bucket is more sensitive to aid offer size

Previous Aid Imbalance

Yield Class	Admitted Student Count	% of Admitted Students	Total Institutional Aid Offered	% of Total Institutional Aid Offered	Median Institutional Aid Offered	Percent Enrolled (Yield)
HIGH	321	13%	\$739,984	14%	\$2,000	51%
MEDIUM	1,136	47%	\$1,986,530	37%	\$2,000	32%
LOW	938	39%	\$2,639,427	49%	\$3,000	22%
Grand Total	2,395	100%	\$5,365,941	100%	\$2,000	31%

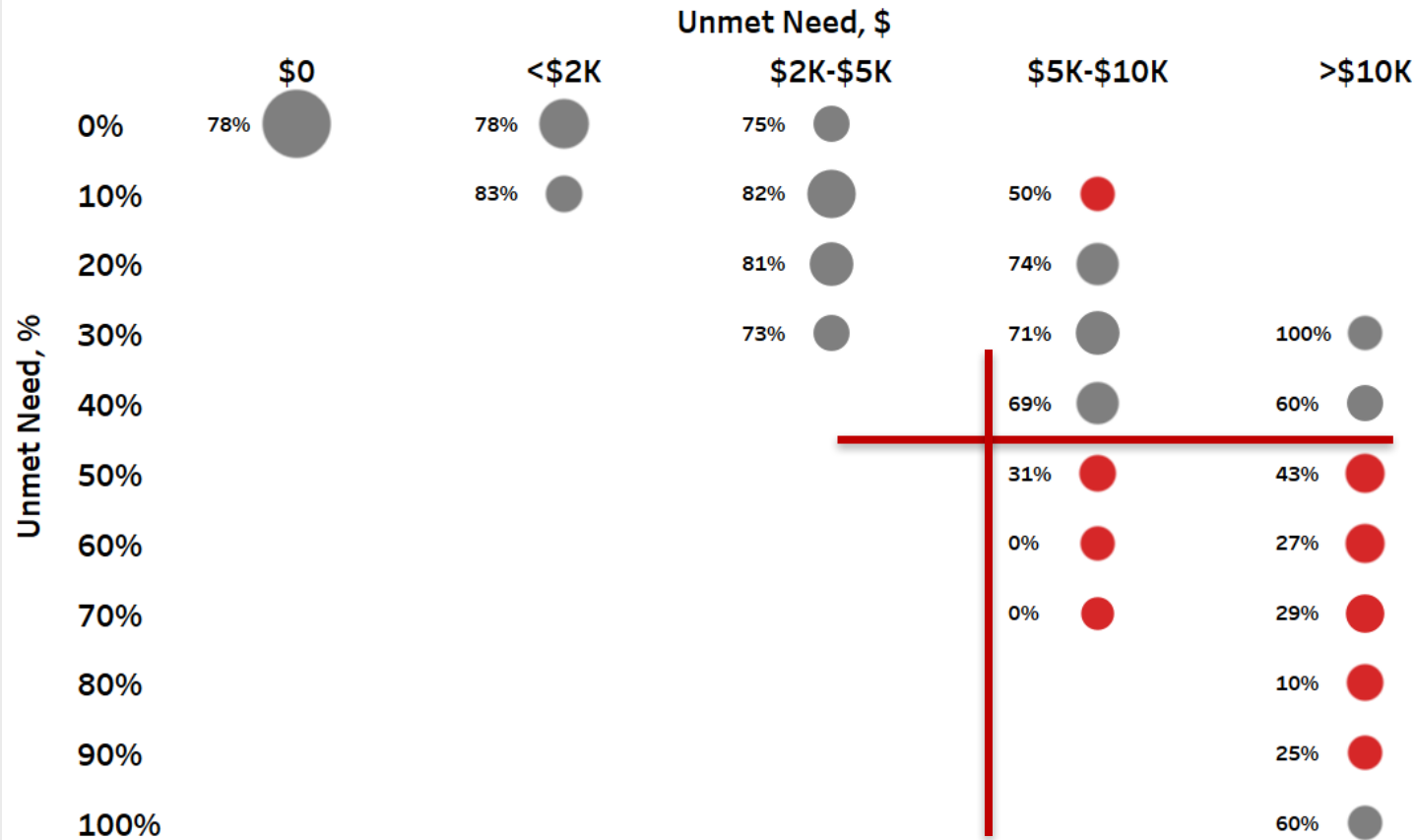
WHAT'S IMPORTANT?

- Almost half of offers were made to students not likely to enroll anyway
- High yield students are enrolling at a high rate even though they were not offered as much aid

Unmet Financial Need

Unmet Financial Need (Absolute and Relative to Total Cost of Attendance) Effect on Retention

First-time, full-time, degree seeking undergraduates Fall 2010-Fall 2016



● 77% Retention

● 24% Retention!!!

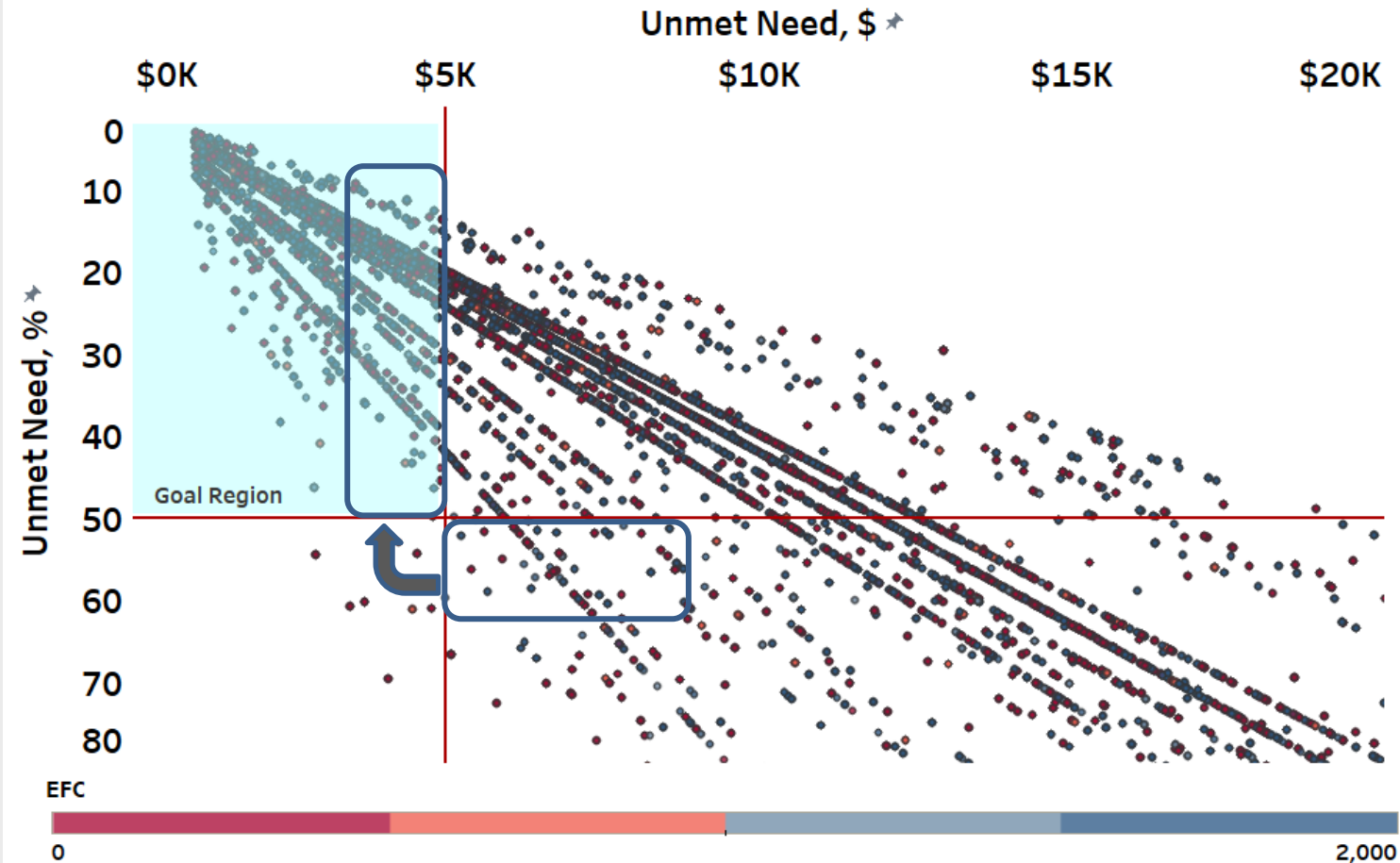
WHAT'S IMPORTANT?

- There is a strong effect of unmet need on retention
- A cliff exists above \$5K and 50% unmet need

The Importance of Need Based Aid

Which Students Should We Focus on To Improve Retention?

Target population for institutional aid: high unmet need, high % unmet need, Low EFC

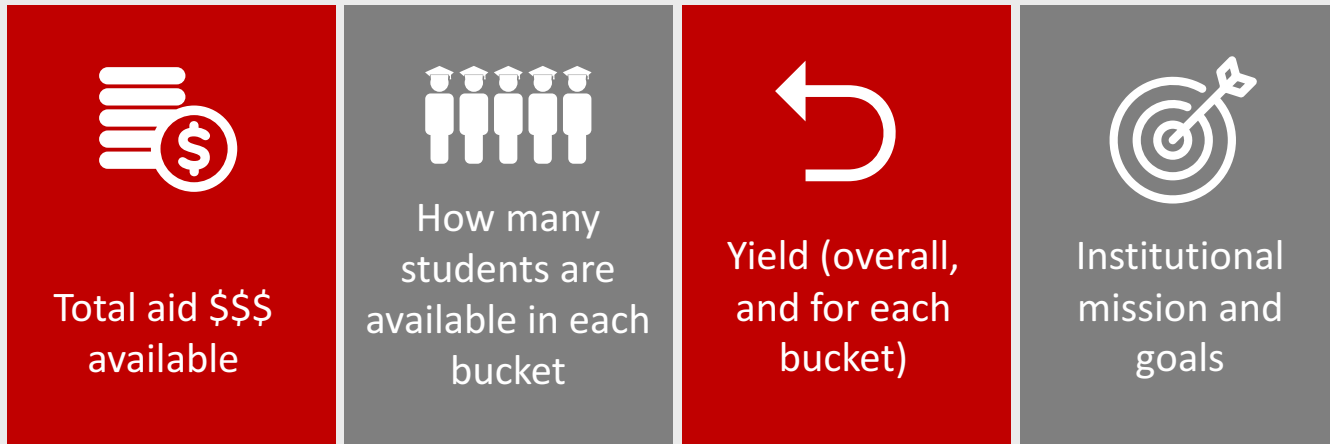


WHAT'S IMPORTANT?

- We can target individual students and incorporate what we know about them to shift them into an area of greater retention likelihood

Advanced Analysis

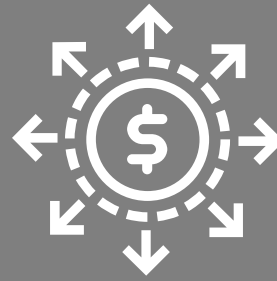
- ▶ Goal
 - + More Effective Use of Financial Aid Dollars
- ▶ How do we get there?
 - + What's the effect of reallocating current aid?
 - + What's the effect of increasing total aid?
- ▶ Considerations



Model Overview



MODEL 1
Revenue
optimization,
fixed aid pool

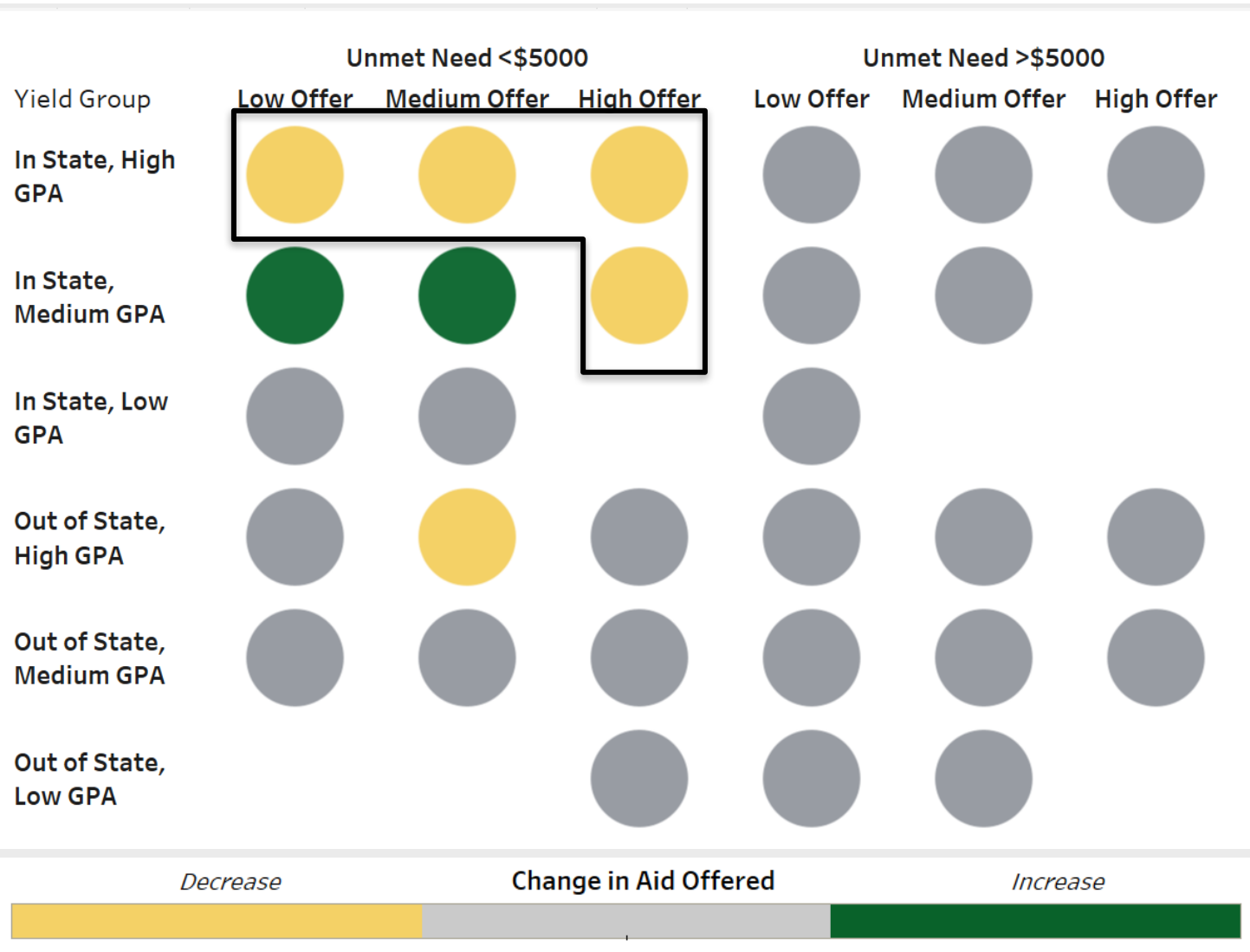


MODEL 2
Aid
Increase



MODEL 3
Targeted Aid
Increase

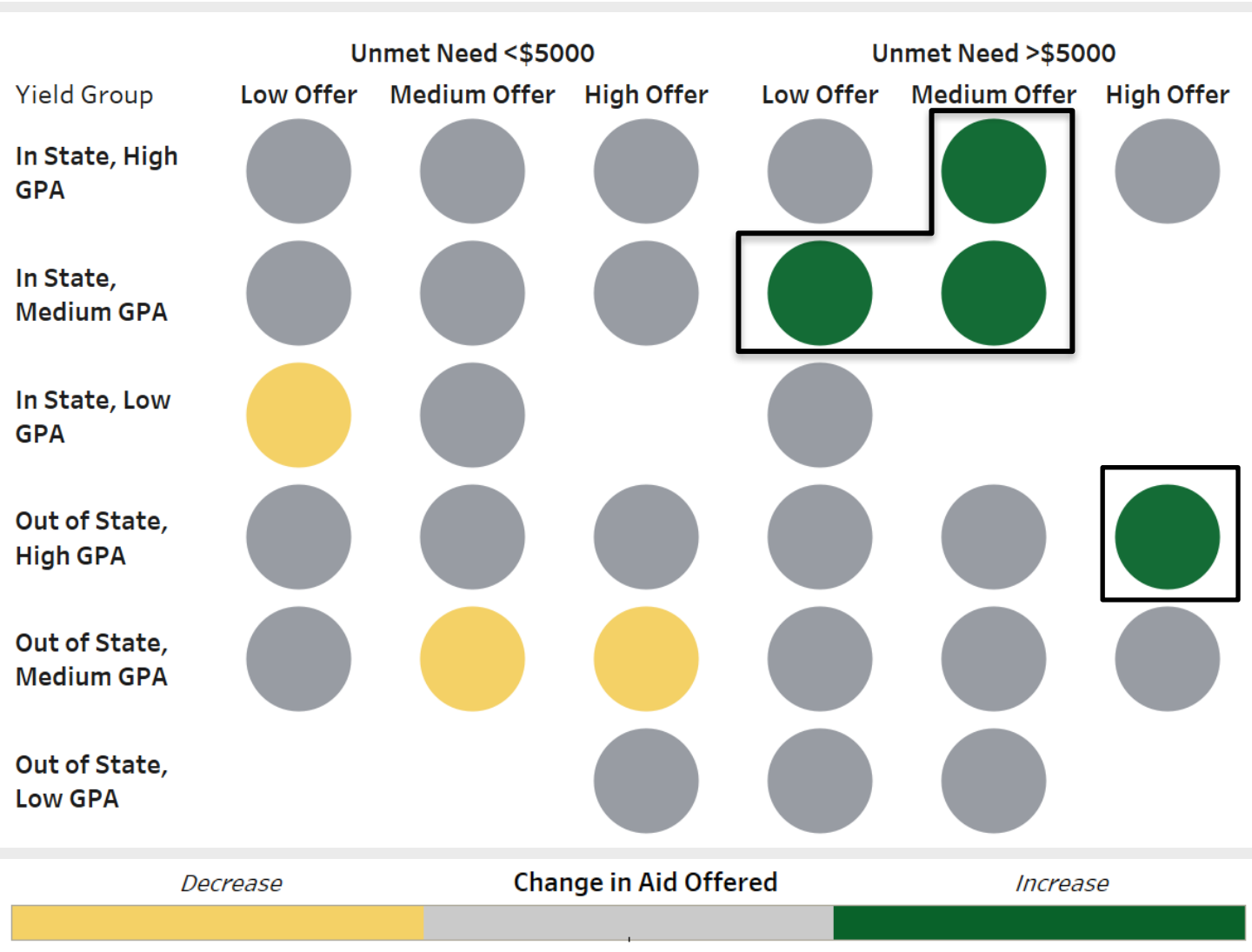
Model 1: Increased revenue, same aid budget



WHAT'S IMPORTANT?

- Net Tuition Revenue increase of ~\$185,000
- Institutional aid reductions to students with *low* unmet need

Model 2: Aid Increase



WHAT'S IMPORTANT?

- Increased institutional aid by %50
- Average unmet need declined
- No shift to <\$5K group
- Yield and Net Tuition Revenue unchanged from Model 1, despite 50% increase in aid

Model 3: Targeted Aid Increase



WHAT'S IMPORTANT?

- ~150-student increase based on unmet need
- Less dramatic increase in Net Tuition Revenue

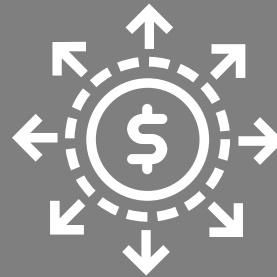
Model Summary



MODEL 1

Revenue
optimization

Redistributed Fixed Aid
Pool, Increased Net
Tuition Revenue



MODEL 2

Aid
Increase

Increased Aid Pool, similar
Revenue to Model 1



MODEL 3

Targeted Aid
Increase

Aid Pool from Model 2,
Increased Enrollment,
Intermediate Revenue

Summary

- ▶ Importance of data access and models
- ▶ Incorporation of multiple sources of data to understand institutional challenges
- ▶ Actionable recommendations based on data
- ▶ Improvement as a cycle