Macalester Financial Model:: INTRODUCTION

Context

MOTIVATION

- Macalester will begin a new strategic planning process in Fall 2021
- The main aim of this document is to help build a shared and foundational understanding of Macalester's financial model, as part of making the strategic planning process more inclusive
- The specific objectives of this document are to: (1) provide an overview of the financial model (e.g., the main sources of revenues and expenses); (2) serve as a periodically updated reference sheet that synthesizes important information usually found in myriad locations; (3) put forth a set of example questions as Macalester heads into the strategic planning process; and (4) generate discussion about the strategic planning process throughout the Macalester community
- The intended audience of this document is the entire community: students, staff, faculty, leadership, alumni, parents, board members, neighbors, and partners

WHAT THIS DOCUMENT IS NOT

- This document is not a set of strategic
 recommendations put forth by the Strategic Planning
 & Analysis Committee. Such recommendations will be
 developed during the strategic planning process and
 be based on many additional factors (e.g., mission,
 student experience) not addressed in this document
- This document is not an attempt to dehumanize students, staff, or faculty by treating them as numbers; nor is it an attempt at maximizing profits. Macalester is a non-profit institution. However, in order to develop strategies and tactics to enhance the student experience and further the College's mission while also ensuring long-term financial viability, it is important to understand the College's finances

HOW SPECIFICALLY MIGHT THIS DOCUMENT INFORM STRATEGIC PLANNING?

- By providing historical context around the growth patterns of income and expenses, changes in the student body size, staffing, financial aid, etc.
- By providing **industry context**: how does Macalester's financial model compare to those of its peers?
- By providing data required to answer two key questions (1) what changes are feasible? (2) what changes would significantly impact the finances?

Overview

SUSTAINABILITY

 For a non-profit to be financially sustainable, the growth rates of the revenues (income) and expenses must match over the long term

REVENUE SOURCES AND GROWTH

	Average Annual	Per Student FTE	Percent of Revenue	Average Growth Rate
Net Tuition & Fees	\$51.1M	\$24,749	46%	3.9%
Room & Board	\$15.0M	\$7,273	14%	3.2%
Endowment Draw	\$35.4M	\$17,163	32%	4.1%
Gifts & Grants	\$6.8M	\$3,316	6%	2.4%
Other	\$1.7M	\$831	2%	5.1%
Total	\$110.1M	\$53,332	100%	3.8%

Notes: Average Annual is the five-year average from FY2015 through FY2019. Average Growth Rate is the five-year cumulative average growth rate from FY2014 through FY2019

MAIN EXPENDITURE BUCKETS AND GROWTH

	Average Annual	Per Student FTE	Percent of Expenses	Average Growth Rate
Compensation & Benefits	\$65.9M	\$31,885	63%	4.3%
Programs	\$27.5M	\$13,317	26%	2.8%
Debt Service, Capital & Projects	\$11.9M	\$5,738	11%	1.3%
Total	\$105.2M	\$50,940	100%	3.6%

Notes: Average Annual is the five-year average from FY2015 through FY2019. Average Growth Rate is the five-year cumulative average growth rate from FY2014 through FY2019

PEER LANDSCAPE

- There is wide variation in the revenue models of peers; just within the Peer 40, the portion of revenue derived from tuition, fees, and room and board ranges from 32% to 88% (Macalester is around 60-62%)
- There is less variation from school to school in the percentages of the budget spent on different types of expenses; however, some peers spend almost three times the amount per student as other peers

ORGANIZATION OF THE DOCUMENT

- Pages 2-3 detail revenue sources and revenue growth
- Pages 4-5 detail expenses and expense growth
- Page 6 compares revenues to expenses over time and in the context of peer schools
- Pages 7-9 begin to identify and analyze some of the key levers of the financial model in order to start the conversation about options for feasible changes



Macalester Financial Model:: REVENUES

Revenue Overview

SOURCES

	Average Annual, 2014/15 - 2018/19	Per Student FTE	Percent of Revenue
Net Tuition & Fees	\$51.1M	\$24,749	46%
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Gifts & Grants	\$6.8M	\$3,316	6%
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WHAT IS NET TUITION?

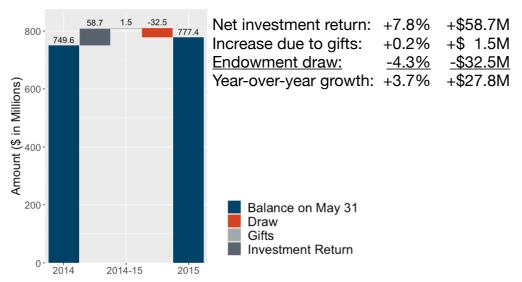
- Students finance the posted tuition through a mix of

 (1) Macalester grants/scholarships, (2) other grants
 (e.g., Pell), (3) federal Direct Loans, (4) other loans and sources of aid (e.g., outside scholarships, loans from Macalester), (5) student employment wages, and (6) cash
- From the College's viewpoint, net tuition is equal to the posted tuition minus grants and scholarships awarded by Macalester

HOW DOES THE ENDOWMENT WORK?

- There are three main changes to the endowment each year: (1) net (of investing costs) investment return (usually but not always positive), (2) gifts to the endowment (e.g., endowed chairs and scholarships), and (3) the draw that is taken out and applied to the operating budget for the year
- The amount drawn from the endowment is approximately equal to 5% of the 16-quarter moving average value of the endowment¹
- To preserve the purchasing power of the endowment, its growth should keep up with inflation (about 2.5% per year); thus, 7-7.5% per year is a target for net investment return

ENDOWMENT EXAMPLE: A "TYPICAL" YEAR

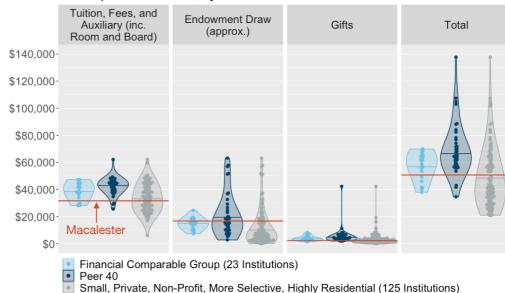


Peer Comparison

REVENUES PER STUDENT FTE

- Macalester's total revenue per student FTE is 38th out of 41 when compared to the Peer 40 schools, but is 50th out of 126 when compared to all small, private, non-profit, more selective, highly residential institutions^{2,3,4}
- In **tuition and fees per student FTE**, Macalester ranks 35th out of 41 and 54th out of 126, respectively
- In **private gifts** per student FTE, Macalester ranks 37th out of 41 and 60th out of 126, respectively^{5,6}

Annual revenue per student FTE, by source

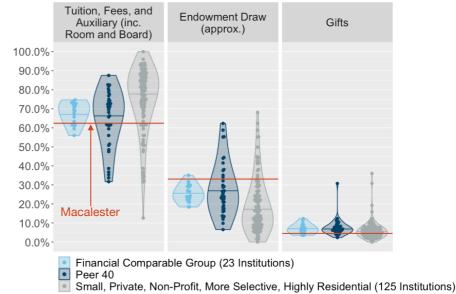


Note: Five-year averages from FY2015 through FY2019

REVENUE COMPOSITION

- Macalester derives approximately 62% of its revenue from tuition, fees, and auxiliary enterprises (inc. room and board)
- By comparison, over 60% of the 125 schools in the broader peer group derive more than 75% of their revenue from students⁷
- Dependence on tuition revenue is a critical metric as the "demographic cliff" nears

Portion of revenue from each main source



Note: Five-year averages from FY2015 through FY2019



Macalester Financial Model:: REVENUES

Revenue Growth

GROWTH RATES OF MAIN REVENUE STREAMS

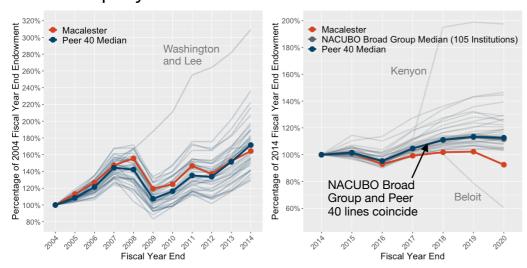
• Five-year cumulative average growth rates (CAGRs), compared to peer group medians:

Total Revenue	3.1%	3.0%	3.3%	2.3%
Gifts & Grants	2.5%	1.1%	-0.1%	0.4%
Endowment Draw	2.2%	4.5%	4.7%	4.3%
Net Tuition, Fees, & Aux.	3.6%	2.9%	2.9%	2.1%
Student FTE	1.1%	0.0%	0.2%	-0.2%
	Macalester	Financial Comps (23)	Peer 40	Broad Peer Group (123)

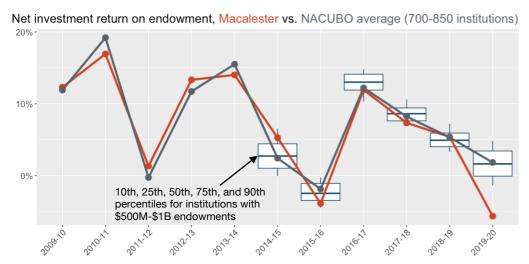
Note: Growth rates based on changes from the three-year averages of FY2012-FY2014 to the three-year averages of FY2017-FY2019

ENDOWMENT GROWTH PEER COMPARISON

- From 2004 to 2014, Macalester's endowment grew an average of 5.1% per year (including investment returns/losses, endowment draw, and new gifts), in line with the median of Peer 40 schools, 5.5%
- From 2014 to 2020, Macalester's endowment shrank by 1.2% per year, compared to a Peer 40 median increase of 2.0% per year:8

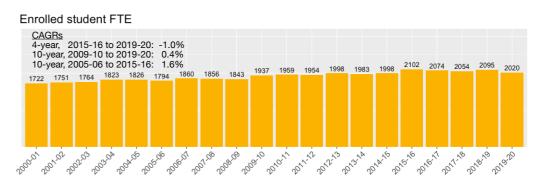


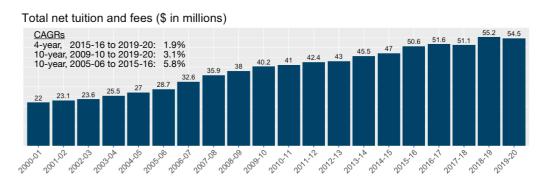
 The main driver of this difference is investment return on the endowment: Macalester's annualized net rate of return over the last five years was 2.8%, below the 5th percentile of all 705 reporting institutions (3.3%). The average five-year annualized return of all 705 institutions was 5.1%

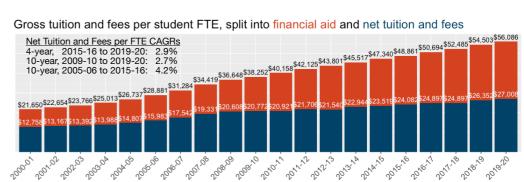


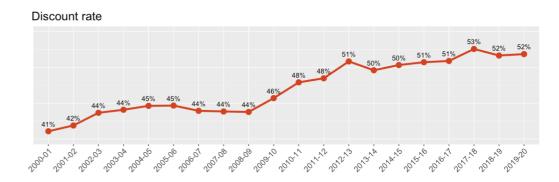
NET TUITION GROWTH

- Over the last 20 years, posted tuition and fees per student have grown an average of 5.1% per year, while net tuition and fees per student after financial aid have grown 4.0% per year
- During that same time, the number of enrolled students has grown by approximately 19% in total
- In the last 10 years, **net tuition growth has slowed** from 5-7% per year to 2-3% per year
- Pricing competition amongst colleges (e.g., the awarding of merit aid to low-need or no-need students) will continue to drive up discount rates and hamper net tuition growth
- Since net tuition and fees comprise almost half of Macalester's revenue, it is important to prevent their growth rate from falling below the current level of 2-3% per year









Macalester Financial Model:: expenses

Expense Overview

BREAKDOWN BY EXPENDITURE TYPE

	Average Annual, 2014/15 - 2018/19	Per Student FTE	Percent of Expenses
Compensation & Benefits	\$65.9M	\$31,885	63%
Programs	\$27.5M	\$13,317	26%
Debt Service, Capital & Projects	\$11.9M	\$5,738	11%
Total	\$105.2M	\$50,940	100%

COMPENSATION & BENEFITS

Faculty salaries: \$19.6M (30%)
 Staff salaries: \$26.9M (41%)
 Student wages: \$3.8M (6%)
 Benefits: \$15.6M (24%)

PROGRAMS

- Programs includes about \$4M per year in each of facilities services and dining services, and about \$5M per year in payouts to study away programs
- Across these lines, about \$2.9M per year was spent on travel and conferences; this number may decrease following the pandemic

	Average Annual, 2014/15 - 2018/19	Percent of Program Expenses	6-Year CAGR, 2013/14 - 2018/19
Facilities Services	\$3.83M	13.9%	0.1%
Dining Services	\$3.90M	14.2%	3.5%
Other Treasurer's Line / Gen. Inst.	\$3.64M	13.2%	3.5%
Treasurer's Line / Gen. Inst. Subtotal	\$11.37M	41.4%	2.3%
Academic Departments	\$1.22M	4.4%	1.5%
Study Away	\$4.86M	17.7%	-1.9%
Library	\$1.58M	5.8%	0.8%
Other Provost's Line	\$1.07M	3.9%	11.5%
Provost's Line Subtotal	\$8.73M	31.8%	0.8%
Athletics	\$0.86M	3.1%	3.0%
Other Student Affairs' Line	\$1.46M	5.3%	3.9%
Student Affairs' Line Subtotal	\$2.31M	8.4%	3.6%
President's Line	\$0.75M	2.7%	14.9%
Admissions and Financial Aid	\$1.55M	5.6%	6.3%
Advancement/Fundraising/Alumni	\$1.66M	6.0%	2.0%
Information Technology	\$1.12M	4.1%	5.8%
Programs Total	\$27.50M	100.0%	2.6%

DEBT SERVICE, CAPITAL & PROJECTS

- Debt service is the cash required to make principal and interest repayments. The five-year average has been \$7.4M per year
- The remaining \$4.5M per year in the third row of the top table is for technology, equipment, and maintenance. This includes renovations and replacements of classroom furniture, lab equipment, signage, etc. Approximately half of this is for facilities services, and approximately one fifth is for ITS

Expense Details

BREAKDOWN BY FUNCTION

 The previous column splits personnel and nonpersonnel expenses. We now combine these and examine expenses by function:9

	•		
	Average Annual, 014/15 - 2018/19	Per Student FTE	Percent of Expenses
Instruction	\$43.5M	\$21,075	38%
Research	\$2.0M	\$952	2%
Academic Support	\$12.5M	\$6,053	11%
Student Services	\$23.0M	\$11,155	20%
Auxiliary Enterprises	\$11.5M	\$5,583	10%
Institutional Support	\$21.2M	\$10,238	19%
Total	\$113.7M	\$55,057	100%

 Academic support includes library, department budgets, etc. Student services includes athletics, career development, residential life, religious & spiritual life, multicultural life, international student programs, admissions, etc. Auxiliary enterprises includes room & board, bookstore, summer rentals, etc. Institutional support includes advancement, administration, legal, insurance, etc.

SPECIFIC UNITS: PROGRAMS + PERSONNEL

- Facilities Services: Five-year average of \$10.1M per year; about two thirds for personnel
- **Library**: Five-year average of \$3.5M per year; about half for personnel and a third for subscriptions
- **Athletics**: Five-year average of \$4.0M per year; about 80% for personnel
- ITS: Five-year average of \$4.1M per year; about 70% for personnel

FUNDING OF RECENT MAJOR CAPITAL PROJECTS

	Gifts	Debt	Operations	Total
Residence Halls (2003)	\$0.8M	\$14.2M		\$15.0M
Leonard Center (2008)	\$24.0M	\$18.0M		\$42.0M
Chiller Plant (2008)			\$7.3M	\$7.3M
Markim (2009)	\$7.7M			\$7.7M
Music (2012)	\$24.0M	\$12.0M		\$36.0M
Studio Art (2014)	\$7.5M	\$15.5M	\$3.5M	\$26.5M
Theater (2019)	\$10.0M	\$22.0M		\$32.0M
Total	\$74.0M	\$81.7M	\$10.8M	\$166.5M

- In total, 44% of the funding was from gifts, 49% from borrowing, and 6% from operations (accumulated budget surpluses)
- Goal: 67% from gifts and 33% through debt



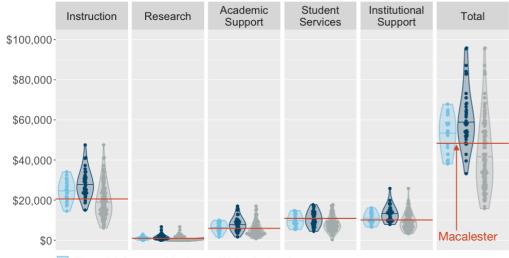
Macalester Financial Model:: expenses

Peer Comparison

EXPENSES PER STUDENT FTE

- Macalester's total expense per student FTE is 38th out of 41 when compared to the Peer 40 schools, but is 52nd out of 126 when compared to all small, private, non-profit, more selective, highly residential institutions
- These rankings are in line with the rankings of total revenues per student FTE
- Within the Peer 40, average annual total expenses range from \$39,377 per student FTE (Beloit) to \$115,436 per student FTE (Williams)¹⁰

Annual expenses per student FTE, by expense category



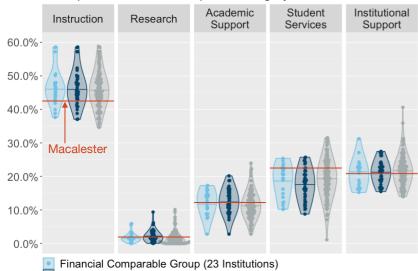
Financial Comparable Group (23 Institutions)
Peer 40
Small, Private, Non-Profit, More Selective, Highly Residential (123 Institutions)

Note: Five-year averages from FY2015 through FY2019

EXPENSE COMPOSITION

- Macalester spends 42.5% of its total expenses (excl. auxiliary) on instruction and 22.5% on student services
- By comparison, the median spent on instruction for both the Peer 40 and broader group is 45.4% and the median spent on student services for the broader group is 19.5%

Portion of expenses from each expense category



Peer 40
Small, Private, Non-Profit, More Selective, Highly Residential (123 Institutions)

Note: Five-year averages from FY2015 through FY2019

Expense Growth

GROWTH RATES OF MAIN EXPENSE CATEGORIES

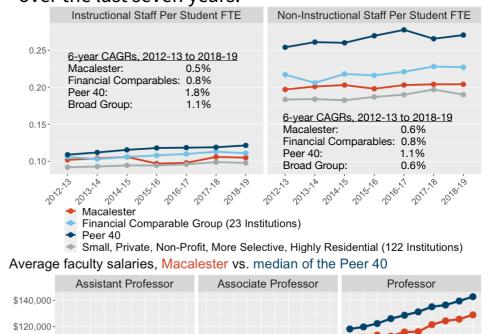
 Five-year cumulative average growth rates (CAGRs), compared to peer group medians, by function and expenditure type:

expenditure type:				
	Macalester	Financial Comps (23)	Peer 40	Broad Peer Group (123)
Student FTE	1.1%	0.0%	0.2%	-0.2%
Instruction	3.7%	2.9%	2.9%	2.4%
Research	-0.1%	1.1%	1.8%	1.1%
Academic Support	3.6%	3.2%	3.5%	2.5%
Student Services	3.6%	5.2%	5.2%	3.8%
Auxiliary Enterprises	2.3%	2.6%	2.6%	1.7%
Institutional Support	2.8%	2.3%	4.0%	2.8%
Total Expenses	3.3%	3.1%	3.2%	2.7%
Salaries & Wages	1.3%	2.3%	2.4%	2.1%
Benefits	2.7%	2.2%	1.8%	2.2%
Depreciation	1.0%	2.7%	3.3%	3.4%
Interest	1.4%	1.9%	4.5%	0.7%
Other	7.0%	5.4%	5.5%	3.4%
Total Expenses	3.3%	3.1%	3.2%	2.7%

Note: Growth rates based on changes from the three-year averages of FY2012-FY2014 to the three-year averages of FY2017-FY2019

HEADCOUNT AND COMPENSATION GROWTH

 Macalester's student FTE to instructional staff FTE ratio (10:1) and student FTE to non-instructional staff FTE ratio (5:1) have stayed relatively constant over the last seven years:



Peer data are not available for staff positions

\$100,000

\$80,000

Macalester 15-year CAGRs: 3.4% for faculty salary pool,
 4.2% for staff salary pool



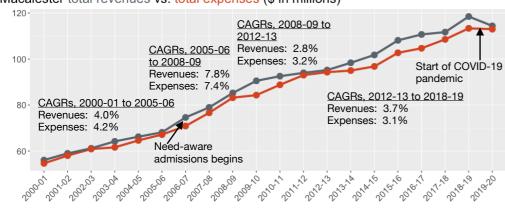
Macalester Financial Model:: REVENUES VS. EXPENSES

Macalester

HISTORICAL CONTEXT

- Over the long term, expenses cannot grow faster than revenues11
- From 2008 to 2012 Macalester's expenses were growing faster than revenues, but in the next six years prior to the pandemic, revenues grew faster than expenses:

Macalester total revenues vs. total expenses (\$ in millions)







- Some of the growth in total revenues and expenses was due to enrollment increases from 1,722.5 student FTE in 2000-01 to 1,998 in 2012-13 to 2,095 in 2018-19
- · However, most of the growth was not due to the increase in student body size; this can be seen by examining the revenue per student FTE:

Macalester revenues per student FTE vs. expenses per student FTE

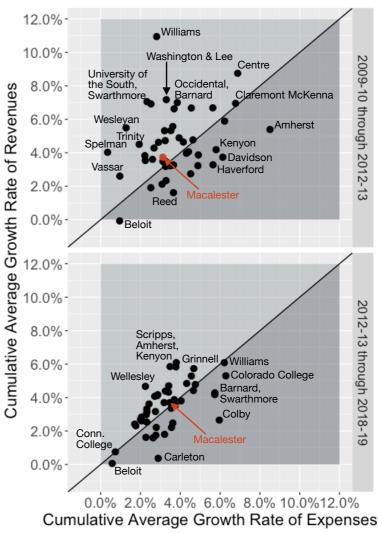




Peer Comparison¹²

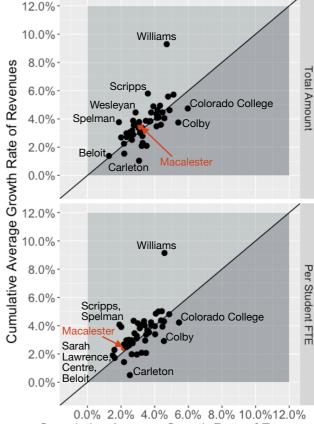
BEFORE AND AFTER 2012-2013

· The average growth of revenues and expenses has slowed across the industry:



NORMALIZED PER STUDENT FTE

- Macalester's average revenue and expense growth rates have been close to each other (near the diagonal line), and close to the peer medians
- Because the student body size has increased over the last decade, on a per student FTE basis, Macalester's average revenue and expense growth rates have been below the peer medians



Cumulative Average Growth Rate of Expenses

Note: Revenue and expense growth rates shown are seven-year CAGRs (average of 2009-10 to 2011-12 through average of 2016-17 to 2018-19)

Macalester Financial Model:: strategic Levers

Levers for Net Tuition and Room & Board Revenue¹³

NET TUITION GROWTH CHALLENGE

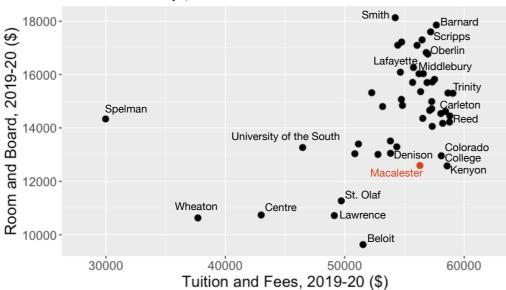
- A critical strategic question is how Macalester can continue to grow net tuition revenue while meeting our mission (i.e., maintaining/improving accessibility, socioeconomic diversity, and other types of diversity)
- Given net tuition targets, (i) How many students should be in each class? (ii) What should the distribution of net tuition be across those students?
- As an example, 30% of students in the Fall 2019 first year class received a tuition discount less than 25%, 34% of students received a 25%-75% discount, and 36% of students received more than a 75% discount
- Trying to change this composition without changing the admissions yield (see right column) could lead to less diverse and less qualified cohorts

STUDENT BODY SIZE

- Because fixed costs comprise the overwhelming majority of the total expenses, additional students usually provide more revenue than expenses
- While increases in the number of students provide extra revenue, they do not drastically change the longterm revenue growth rate or ameliorate the slope problem
- Key considerations in setting the size: (1) capacity (dorms, dining hall, faculty/staff); (2) ability to increase the number of students choosing to attend without negatively impacting the type of students or overall selectivity; (3) endowment draw per student

ROOM & BOARD

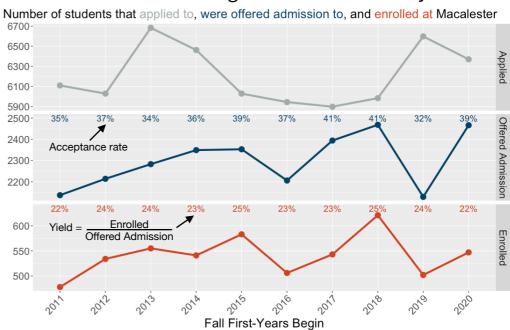
• Increase prices? Macalester room & board is 4th lowest of Peer 40, \$2700 below the median



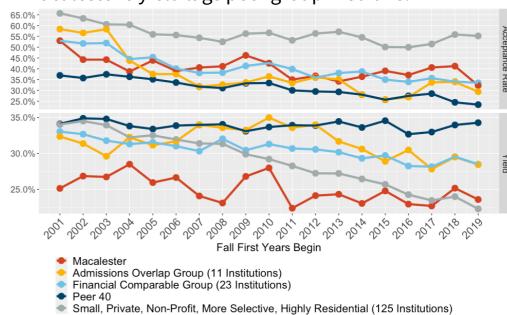
 Increase capacity? If so, increase overall student body size or the number of semesters on campus per student? In 2019-20, 62% of Macalester students lived in college-owned housing. This was the lowest in the Peer 40, which had a median of 94%

ADMISSIONS YIELD

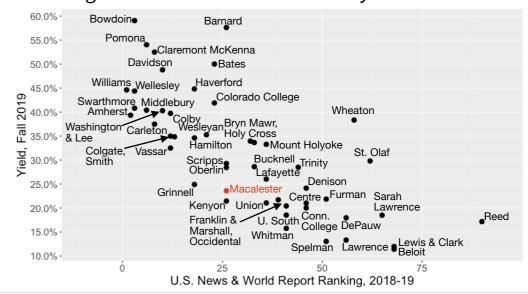
- Admissions funnel: student applications, admissions and aid offers, enrollment decisions by students
- A key metric is **yield**, which is the percentage of students offered admission that actually enroll
- First-year yield has been between 22% and 25% each of the last ten years
- If yield increases: either admit fewer students or admit the same students and grow the student body size



• Macalester's yield lags peer group medians:14



Prestige is one factor that influences yield:



Macalester Financial Model:: strategic Levers

Levers and Scenarios for New Programs, Gifts, and Endowment

NEW PROGRAMS

- Continue some variant of Module 5 (summer **session)**? This could lead to additional income, shorter times to graduation, and/or the opportunity for students to spread their work out over the year
- Develop summer programs for high school juniors like Carleton and Middlebury? Tend to yield less revenue but also serve as marketing
- New Macalester study away programs (domestic or international)?
- New post-baccalaureate, BFA, or graduate programs?

HOW TO GROW THE ENDOWMENT?

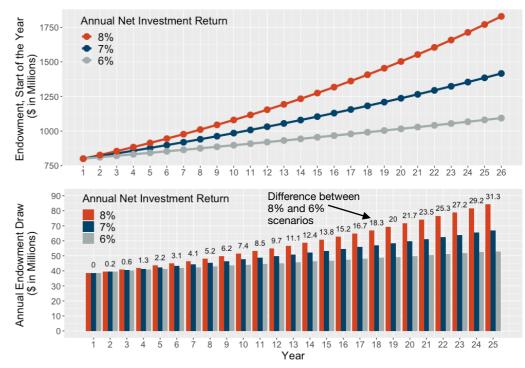
- Over the medium to long term, there are **three main** levers to grow the endowment: (1) raise funds (gifts to the endowment), (2) improve investment returns; and (3) reduce the annual endowment draw
- · We briefly elaborate on each of these levers on the remainder of this page

FUNDRAISING

- A gift of \$1.5M currently funds a full student scholarship each year in perpetuity. A gift of \$3M funds an endowed faculty chair
- Both key metrics of an institution's constituency capacity to give and inclination to give - present fundraising challenges:
 - High net worth households drive fundraising and fewer are associated with Macalester. Historical access has led to a higher percentage of students who receive financial aid and our mission attracts students who are less likely to go into positions with very high salaries
 - Lower sense of ownership amongst Macalester alumni than those of many of our peer schools leads to lower inclination to give. Important strategic questions: How we can foster a close and longlasting connection between students and Macalester? How can we cultivate a sense of responsibility to make the College financially accessible to future generations of Macalester students?
- Strategic priorities: engage alumni through volunteerism, planned giving¹⁵, and corporate **fundraising**, the latter of which Macalester has not focused on in the past

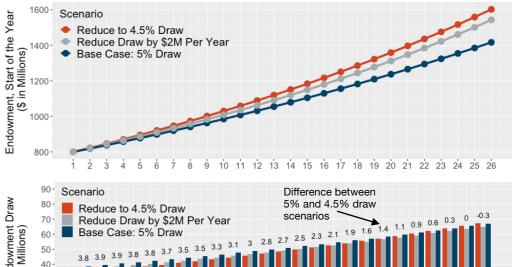
NET INVESTMENT RETURN

• The difference between an 8% return and a 6% return for seven years corresponds to a difference of over \$5M in the annual operating budget for all subsequent years:16



ENDOWMENT DRAW

- It is best to **avoid one-time draws**; e.g., after an emergency draw of \$10M today, we would need to reduce the draw by \$1.42M per year for ten years to reach the same balance¹⁷
- Decreasing the percentage of the endowment that is withdrawn annually results in a lower contribution to the annual operating budget in the short term, but a higher contribution in the long term
- Example: reduce the annual endowment draw (a) from approximately 5% to approximately 4.5% of the average endowment value over the last four years, or (b) by \$2M per year:18





Macalester Financial Model::strategic Levers

Levers to Reduce Expenses

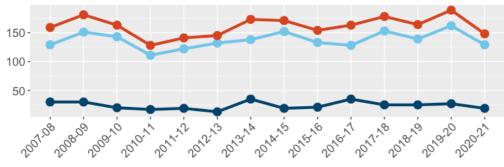
PERSONNEL EXPENSES

- Reducing per FTE staff and faculty salary growth is not a sustainable option
- Rather, curb the growth of headcount:
 - (1) shift and consolidate staff positions according to trends in student behavior; and/or
 - (2) reduce the total number of courses (e.g., partial replacement of sabbaticals, fewer courses with under 10 students)

Percent of 2019-2020 courses and enrollments with 1-9 students, 10-19 students, 20-29 students, and 30 or more students



Number of courses with 1-4 students, 5-9 students, and less than 10 students



- Since 2007, 163 is the median number of course sections per year with fewer than 10 students¹⁹
- Halving that number of course sections would save \$1-2M per year in salaries, and increase the student-tofaculty ratio from 10:1 to 11:1

NON-PERSONNEL EXPENSES

- Continue to reduce utilities expenses in conjunction with sustainability efforts (already about 15% lower than five years ago)
- Travel and conference fees may slow following the pandemic due to technological advances and familiarity with new communication formats
- Reduce study away payments from Macalester to third party programs by carefully reconsidering which programs are eligible for study away?
- Decrease the number of ongoing periodical subscriptions?
- Slow the growth of academic program budgets?

Data Sources

REVENUES

- Revenue overview: Macalester College Fact Book
- Endowment example: Endowment balance at beginning and end of the year from IPEDS, net investment return and gifts from audited financial statements, and endowment draw from Macalester College Fact Book
- Comparisons to peers in terms of revenues per student FTE and revenue composition: IPEDS
- Growth rates of main revenue streams: IPEDS
- Fiscal year end endowments: IPEDS (2004-2014) and NACUBO (2014-2020)
- Net investment returns: NACUBO. Macalester's submission to NACUBO from Investment Office, Gary Martin
- Posted tuition and fees, enrollment, and discount rate:
 Macalester College Fact Book

EXPENSES

- Breakdown by expenditure type: Macalester College Fact Book
- Compensation and benefits: Macalester College Fact Book
- Programs: Dave Berglund, Accounting
- Breakdown by function: Audited financial statements
- Specific units: Dave Berglund, Accounting
- Major capital projects: Finance Committee presentation, February 2021, David Wheaton
- Comparisons to peers in terms of expenses per student FTE and expense composition: IPEDS
- Growth rates of main expense categories: IPEDS
- Headcount: IPEDS
- Faculty salaries: AAUP

REVENUES VS. EXPENSES

- Macalester revenues vs. expenses (including Introduction page): Macalester College Fact Book
- Comparison of revenues vs. expenses to peers: IPEDS

STRATEGIC LEVERS

- · Tuition discount split: Financial Aid, Brian Lindeman
- Peer room & board prices: IPEDS
- Percent of students living in college-owned housing:
 U.S. News & World Report
- Macalester admissions: Macalester College Fact Book
- Peer acceptance rates and admissions yields: IPEDS
- Macalester class sizes: Institutional Research



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Notes

REVENUES

¹The actual endowment draw formula is more complicated. At the end of each quarter, the endowment is written as the product of a unit price and the number of units (similar to a share price and number of shares for a publicly traded stock). For example, on May 31, 2020, the unit price was \$26.148, the number of units was 25.348M, and the endowment value was \$662.8M. The endowment draw is determined by the following three formulas, with the two values computed in the latter two substituted into the first formula:

- quarterly endowment draw before adjustments = quarterly spending rate per unit * (current number of units + projected number of new units)
- quarterly spending rate per unit = average unit price over the last 16 quarters * 5% * 50% * 25% + quarterly spending rate per unit one year prior * 102% * 50%
- projected number of new units = projected dollar value of new gifts to the endowment for the coming quarter * 50% / current unit price

The current unit price and number of units are updated each quarter as follows:

- new unit price = previous unit price * (1 + quarterly net investment return percentage) quarterly spending rate per unit
- new number of units = actual dollar value of new gifts to the endowment for the past quarter / new unit price
- ² Small, private, non-profit, more selective, highly residential includes private, non-profits with full-time equivalent Fall 2018 enrollment less than 4000 students, Carnegie classification undergraduate profile of "more selective" (14) and Carnegie classification size and setting of "small, highly residential" or "medium, highly residential" (11 or 14)
- ³ Financial comparable group comprised of 23 small, private, non-profit, more selective, highly residential institutions that meet two additional criteria for five-year averages from AY2014-15 to AY2018-19: (1) Total estimated revenue per student FTE between \$35,000 and \$70,000 (Macalester at \$50,700), and (2) 55%-75% of total estimated revenue is derived from net tuition, fees, and auxiliary enterprises (Macalester at 62.4%). Group members: Bryn Mawr, Carleton, Centre, Colby, Colgate, Colorado College, Davidson, Denison, DePauw, Furman, Lafayette, Lawrence, Mount Holyoke, Oberlin, Reed, Scripps, Spelman, University of the South, Trinity, Vassar, Wesleyan, Wheaton (IL), Whitman
- ⁴Macalester's Peer 40: Amherst, Barnard, Bates, Beloit, Bowdoin, Bryn Mawr, Bucknell, Carleton, Claremont McKenna, Colgate, Colby, Holy Cross, Colorado College, Connecticut College, Davidson, Franklin and Marshall, Grinnell, Hamilton, Haverford, Kenyon, Lafayette, Lawrence, Middlebury, Mount Holyoke, Oberlin, Occidental, Pomona, Reed, Sarah Lawrence, Scripps, Smith, Swarthmore, Trinity, Union, University of the South, Vassar, Washington and Lee, Wellesley, Wesleyan, Williams
- ⁵ Gifts correspond to "private gifts unrestricted" variable in IPEDS
- ⁶ Each "violin" in these plots represents the distribution of the variable across the specified group of schools, with the widest portions of the violin corresponding to the most common values. For example, the blue violin on the first subplot tells us that most of the Peer 40 institutions receive \$40-50k per student FTE in tuition, fees, and auxiliary enterprises each year. The top corresponds to Middlebury, at over \$62k. The horizontal lines represent the medians
- ⁷ Exact endowment draw is not available for peers. It is approximated here as 4.75% of each institution's endowment value at the beginning of the fiscal year
- ⁸The NACUBO broad group consists of all institutions in the small, private, non-profit, more selective, highly residential group with an endowment value over \$100M at 2019 fiscal year end

EXPENSES

- ⁹There is a difference between the total expenses by expenditure type and total expenses by function due to accounting differences; namely, the latter is taken from the financial statements, which include "off book" activities such as grants
- ¹⁰ Total expenses shown in the figure exclude auxiliary enterprises as well as other expenses such as hospital services and net grant aid. The quoted numbers for Williams and Beloit include auxiliary enterprises. There are some accounting differences in these IPEDS categories; e.g., Macalester and most of the Peer 40 schools include athletics in student services, but some do not



Macalester Financial Model:: APPENDIX

Notes (cont.)

REVENUES VS. EXPENSES

- ¹¹ This has been referred to as "the slope problem;" see the Spring 2011 and Spring 2014 RPC reports at https://www.macalester.edu/provost/reports/
- ¹² Peers includes all 47 institutions that are either in Peer 40 or Financial Comparable Group of 23

STRATEGIC LEVERS

- ¹³ Many components of the financial model are sticky/hard to change. This section highlights examples of some metrics and levers that are either easier to control (e.g., endowment draw) or merit a significant amount of strategic thought even if harder to control directly (e.g., yield)
- ¹⁴ Admissions overlap group: Carleton, Colorado College, Denison, Grinnell, Kenyon, Lawrence, Lewis & Clark, Middlebury, Oberlin, St. Olaf, Vassar
- ¹⁵ Planned giving is part of a donor's estate planning as opposed to discretionary annual income
- ¹⁶ Assumes starting endowment of \$800M, draw equal to 5% of average endowment size over the most recent four years, and \$1.5M gifts to the endowment per year (part of a donor's estate planning as opposed to discretionary annual income)
- ¹⁷ Assumes starting endowment of \$800M, 7% net investment return, draw equal to 5% of average endowment size over the most recent four years, and \$1.5M gifts to the endowment per year
- ¹⁸ Assumes starting endowment of \$800M, 7% net investment return, and \$1.5M gifts to the endowment per year
- ¹⁹ Excludes courses worth fewer than four credits, labs, independent studies, and 2021 Module 5 courses; cross-listed courses only counted once

