Appendix A

Charge to the FAS Financial Study Group, AY 20-21

The Faculty of Arts and Sciences has, for hundreds of years, pursued a mission of excellence in teaching and research through a model of intergenerational learning that places a residential liberal arts college at the heart of the world's leading research university. The 2020 pandemic has profoundly upended the living and learning community of the FAS, and poses serious and ongoing challenges, financial and otherwise, to our academic work. In a context of broad excellence, the pandemic has forced us to identify our highest priorities and the activities that define the Faculty's singular contribution to society. We have all been drawn here to championtruth and advance knowledge to the betterment of the world around us and the deepening of our understanding of what it means to be human. As we emerge from this crisis, we seek to reestablish the primacy of this mission and strengthen the integration of faculty, student, and staff activities around our academic core.

At the same time, we seek to chart a course for a financially sustainable future, recognizing thatour mission is held in trust for future generations. Moreover, the pandemic has revealed the critical importance of financial and organizational flexibility for our long-term resilience. Our ability to direct resources to areas of highest need and opportunity and to adapt structures to new functions not only shape our response to crises, but also enable the continuous innovation that sustains the vitality of our research and teaching mission. The post-pandemic future of the FAS will require us to be financially nimble and adaptive.

To find new opportunities for increasing flexibility and resilience, we must first understand our current budget reality. As befits our mission, the majority of our expenses (for example, 80% ofour staff costs) are incurred in our departments and other academic units, academic support programs, and student support services. FAS is a large organization that encompasses a broad range of activities and while we should be capacious in our approach, real progress on increasing our financial sustainability will remain elusive without achieving a deeper understanding of our academic structures and needs and how we fund them.

I am eager to bring the expertise and insights of the faculty to bear on this challenge. To that end, I am forming a financial study group with the goal of providing informed guidance to the FAS Dean on how to leverage our financial resources to support our academic mission and position the FAS for broad-based excellence, innovation, and sustainability in the aftermath of the pandemic, but also for the decades ahead. The work of the study group builds upon the considerable advances achieved by the financial workstream of the FAS Scenario Planning Group. That previous work, focused in the first instance on estimating the short-term costs of our campus reopening plans, established a new framework for assessing the FAS financial position and suggested approaches to addressing the longer-term financial challenges we face.

To fulfill its charge, the study group will:

Perform analysis

- Develop a deep understanding of the FAS financial position, examining how resourcesare allocated to support our current academic activities and structures, and making explicit the assumptions driving the current approach to budgeting.
- Catalog the variety of academic structures in the FAS (center, institute, program, department, etc.), create definitions for each that reflect structural as well as functionalcharacteristics, develop indices that measure performance for each structure.

Define principles and best practices

- Looking across and beyond higher education, develop principles and identify best practices for budget planning and resource allocation; and propose metrics to aid ongoing assessment of FAS financial conditions and strengthen financial planning.
- Define a set of principles and metrics to guide consideration of whether current academic structures adequately support faculty innovation, high academic performance,and academic as well as financial sustainability.

Report

- Share updates on the work of the study group with the faculty at appropriate intervals,in partnership with the FAS Dean.

Make recommendations and suggest areas for additional work

- Based on the analysis, principles and best practices, make recommendations on how tobest position the FAS for broad-based excellence, innovation and sustainability.
- If in the process of carrying out this work the committee identifies opportunities in administrative units or programs for furthering institutional flexibility within FAS, bring forward recommendations for additional targeted reviews by appropriate bodies.

The study group will include faculty from each of the academic divisions and SEAS, drawing on the diverse expertise and perspectives represented in the FAS. The FAS Dean for Administrationand Finance, the FAS Dean for Faculty Affairs, and the University CFO will serve as *ex officio* members, which will strengthen the group's capacity to consider simultaneously the FAS academic mission and the financial and organizational models that support it. The study group will be assisted in their work by an FAS financial analyst and a project manager.

The study group will be convened in Fall 2020 and will issue a final report to the FAS Dean summarizing their conclusions in Spring 2021. I look forward to supporting the group's effortson what I hope will prove to be vital, enabling and inspiring work for the future excellence ofthe FAS.

FAS Finance Study

Subcommittee Final Recommendations

October 17, 2021

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ECONOMIC BUDGETING

Subcommittee: John Campbell (chair), Stephen Blyth, Jay Herlihy, Thomas Hollister, and Jeremy Stein

Current Approach to FAS Budget Analysis

Traditional FAS practice uses standard accounting concepts that track finances over one or a few years, including

- Operating revenues and expenses
- Depreciation of capital assets (e.g., buildings)
- Endowment distributions
- Endowment decaps and recaps (special withdrawals from and contributions to the endowment)
- Debt interest payments
- Issuance of new debt and repayment of outstanding debt
- Current-use and endowment gifts
- Changes in reserve balances

This generates a measured accounting deficit that is the main focus of concern.

The deficit can be “solved” by adjusting endowment and debt management policies, or by altering near-term spending projections.

Limitations of the Current Approach

- Reports are hard to interpret without a good knowledge of accounting.
- Reports do not distinguish between temporary deficits and long-term structural deficits.
- “Solutions” are frequently misleading because their future costs remain hidden:
  - Decaps reduce future endowment distributions.
  - Borrowing must be repaid in the future.
  - Reduced capital spending can imply deteriorating facilities.

An Alternative Long-Term Budget Framework (1): Cash-Flow Forecasts

We propose an alternative framework that begins with long-term cash-flow forecasts:

- We forecast the operating revenues and expenses of the FAS, which are driven by mission priorities rather than financial management.
- We also forecast capital expenditures, including the balance of undergraduate house renewal and all expenditures needed to maintain the FAS physical plant.
- We place minimal reliance on accounting conventions.
- We capture the long-term consequences of all scenarios by extending forecasts into the indefinite future, with appropriate growth rate assumptions for outyears.
- Forecasts are in nominal (current-dollar) terms with an inflation assumption.

An Alternative Long-Term Budget Framework (2): Discounting to the Present

We need to express cash flows at different dates in comparable units.

To do this, we calculate their present value using standard discounting methodology.

We use a nominal discount rate, since we are discounting nominal (current-dollar) cash flows.

- Our nominal discount rate equals the expected real return on the endowment (5% in the base case) plus assumed inflation (2% in the base case).
- For example, revenue of $107 next year has a present value of $100 because $100 invested in the endowment today is expected to generate $107 next year.

The present value of the operating and capital costs of FAS exceeds the present value of its operating revenues.

Equivalently, the present value of all future cash flows is negative.

An Alternative Long-Term Budget Framework (3): Adding Up Present Values

The present value of all future cash flows is negative because the operating and capital costs of FAS exceed its operating revenues.

We add the assets of FAS: the current market value of the endowment, less the value of outstanding FAS debt.

We add the present value of future gifts that FAS expects to receive, net of future costs associated with those gifts.

The total is still negative and represents a shortfall in assets relative to the activities of the FAS.

Finally, we annualize this shortfall to obtain a structural FAS budget deficit.

- The structural deficit is the shortfall times the expected real return on the endowment (5% in the base case).
- If the FAS received additional annual real (inflation-adjusted) income of this amount every year, the present value of that income would equal the shortfall.
- To eliminate the shortfall, FAS needs to permanently increase revenue or decrease costs by this amount.

Advantages of Our Framework

Our framework:

- Eliminates the need to model endowment and debt management decisions which can only change the timing of cash flows, not their present values. In particular, Corporation decisions about endowment payouts have no effect on our analysis.
- Makes clear that the size of the endowment must be compared with the obligations it is already expected to fund. Looked at this way, the FAS endowment is inadequate.
- Focuses attention on the important decisions, which are about managing operating revenues, operating costs, and capital expenditures.
- Easily accommodates alternative assumptions about the return on the endowment and the growth rates of various types of revenues and expenses. Scenario analysis reveals which features of the environment and which FAS decisions are important for long-term financial sustainability.

Implementation of our Framework

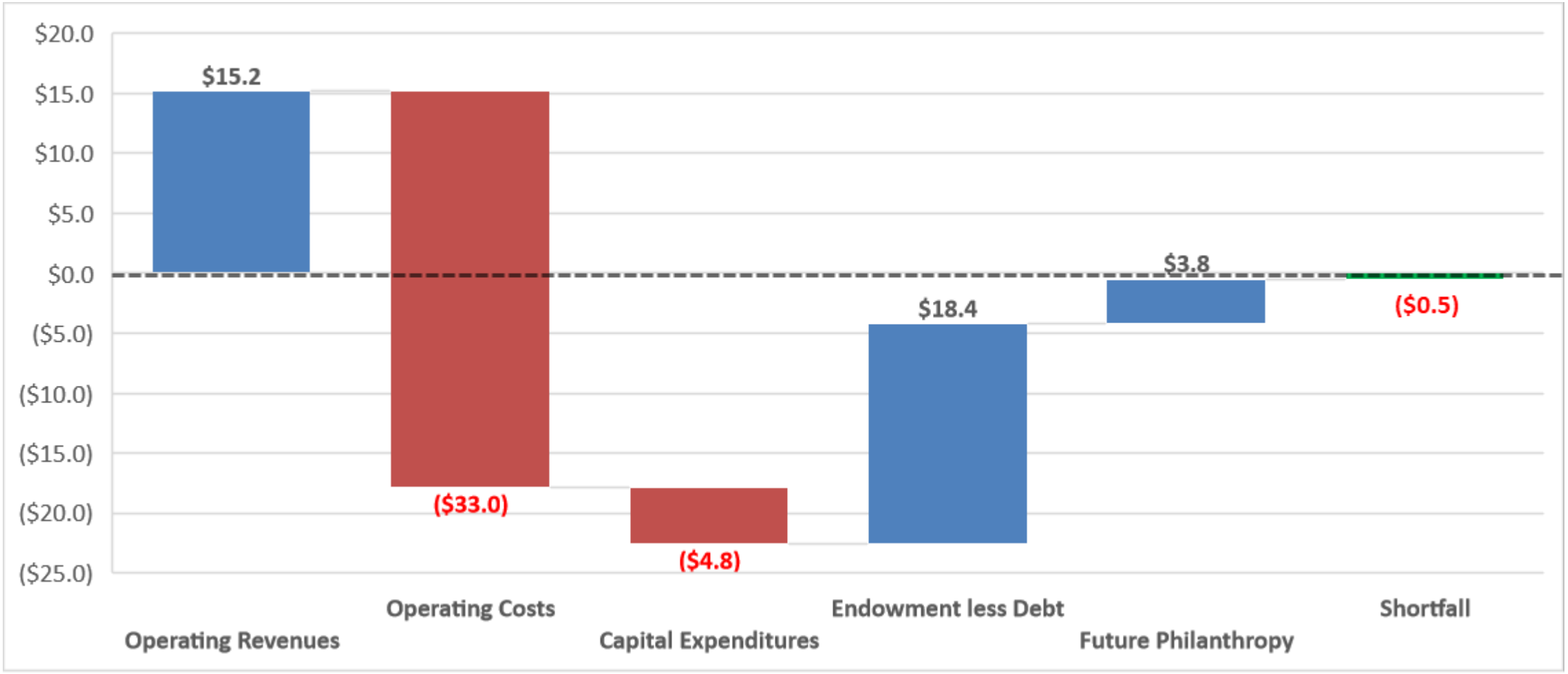
Implementation:

- We base our analysis on the FAS multi-year financial plan for FY21 through FY24, and growth rate assumptions thereafter.
- Base case assumptions are given below. The main focus is on a nominal discount rate of 7%, corresponding to a real endowment return of 5% consistent with Harvard's 5% long-term endowment payout rate.
- For comparison, we also consider a nominal discount rate of 6% to illustrate the exposure of FAS to lower endowment returns.

Inflation Assumptions	
Inflation Rate	***2.0%***
Real Growth Rate Assumptions	
- Compensation (FY24 & Beyond)	***1.0%***
- Def'd Maint (FY24 & Beyond)	***1.0%***
- Student Inc (FY24 & Beyond)	***1.0%***
- Sponsored Rev (FY24 & Beyond)	***0.0%***
- Other Income (FY24 & Beyond)	***0.0%***
Nominal Discount Rate - Scenario 1	***7.0%***
Nominal Discount Rate - Scenario 2	***6.0%***

Summary of Base Case: Present Value Shortfall of $0.5 billion

Results are present values measured in billions of $'s



Interpretation of the Base Case

Interpretation of our findings:

- **In our base case, the FAS has a present value shortfall of $.47 billion.**
- **This corresponds to a real structural deficit of $24 million (5% x $0.47 billion) per year.**
- Full details are presented in a spreadsheet on the next slide.
- Column 1 shows present values under the base case assumption of a 5% average real endowment return corresponding to a 7% nominal discount rate.
- Column 2 shows present values under an alternative assumption of a 4% average real endowment return corresponding to a 6% nominal discount rate.
- Remaining columns show cash-flow forecasts for specific future years.

	Net Present Value of Cash Flows											
	Scenario 1	Scenario 2										
	7.0%	*6.0%*		FY22	FY23	FY24 & Beyond	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Cash Flows from Operations													
Revenues													
- Student Income (net of Financial Aid)	9,432.5	12,464.4		330.8	370.5	374.7							
- Sponsored Revenue	4,001.0	4,954.3		187.6	191.0	194.5							
- Other Income	1,756.8	2,168.5		112.3	79.9	84.0							
Operating Revenues Total	15,190.3	19,587.1		630.6	641.5	653.2							
Costs													
- Compensation & Benefits	(19,401.6)	(25,640.3)		(699.1)	(733.4)	(771.1)							
- Operating Space Costs	(4,325.2)	(5,354.0)		(207.7)	(208.4)	(209.9)							
- Other Costs	(9,283.4)	(11,491.6)		(443.6)	(449.5)	(450.5)							
Operating Costs Total	(33,010.2)	(42,485.9)		(1,350.5)	(1,391.3)	(1,431.4)							
NET OPERATING CASH FLOWS	(17,819.9)	(22,898.8)		(719.9)	(749.9)	(778.3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flows from Capital Expenditures													
Capital Expenditures	(2,283.9)	(2,830.8)		(94.3)	(111.9)	(111.6)							
House Renewal	(596.3)	(618.3)		(58.2)	(45.0)	(80.7)	(91.4)	(141.4)	(123.1)	(121.0)	(120.1)	0.0	0.0
Aspirational Projects w/o Funding Source	(204.7)	(208.2)		(39.8)	(63.7)	(45.5)	(44.7)	(38.1)	0.0	0.0	0.0	0.0	0.0
Deferred Maintenance Needs	(1,677.9)	(2,244.0)		(5.3)	(39.8)	(70.0)							
TOTAL CAPITAL EXPENDITURES	(4,762.9)	(5,901.3)		(197.5)	(260.4)	(307.8)	(136.1)	(179.5)	(123.1)	(121.0)	(120.1)	0.0	0.0
OPERATING & CAPITAL CASH FLOWS	(22,582.8)	(28,800.0)		(917.4)	(1,010.2)	(1,086.1)	(136.1)	(179.5)	(123.1)	(121.0)	(120.1)	0.0	0.0
Existing Wealth													
Endowment Market Value	19,338.4	19,338.4											
Unspent Endowment Distributions	305.0	305.0											
Market Value of FAS Debt	(1,288.0)	(1,288.0)											
TOTAL EXISTING WEALTH	18,355.4	18,355.4											
Cash Flow Future Philanthropy													
Current Use Gifts	1,384.1	1,716.5		59.3	61.0	67.8							
House Renewal Gifts	62.0	63.1		15.3	15.8	13.7	12.2	7.5	6.0	0.0	0.0	0.0	0.0
Budget-Relieving Endowment Gifts	2,310.7	2,862.2		121.0	117.0	125.0							
TOTAL PHILANTHROPY	3,756.7	4,641.8		195.6	193.8	206.6	12.2	7.5	6.0	0.0	0.0	0.0	0.0
TOTAL EXISTING WEALTH & PHILANTHROPY	22,112.1	22,997.2		195.6	193.8	206.6	12.2	7.5	6.0	0.0	0.0	0.0	0.0
Difference	**(470.6)**	**(5,802.8)**											
Annualized Structural Deficit	**(23.5)**	**(232.1)**											

Scenario Analysis (1): Endowment Returns

Scenario analysis can be used to understand the sensitivity of our results to alternative assumptions about endowment returns:

- The FAS is extremely vulnerable to a lower average return on the endowment. If we use a 6% discount rate, corresponding to a 4% average real return on the endowment, the present value shortfall is $5.8 billion corresponding to a real structural deficit of $232 million (4% x $5.8 billion) per year.
  - In the current market environment of low interest rates and high stock prices, the assumption of a 5% real return is ambitious and 4% may be more realistic.

Scenario Analysis (2): Growth Rates of Operating Cash Flows

Scenario analysis can also be used to understand the sensitivity of our results to alternative assumptions about the growth rates of operating cash flows:

- Our results are highly sensitive to these assumptions.
- In the base case we assume that real compensation growth of 1% per year resumes in FY24 and subsequently, and also that real student income grows at 1% per year (but other revenue sources do not grow in real terms).
- If we assume 0.5% faster growth in real compensation from FY24, the shortfall increases by about $2.7 billion and the structural deficit increases by about $134 million.
- The long-term budget framework correctly focuses attention on ways to grow revenues over time relative to costs.

So How Did We Get Here?

The remainder of this presentation offers a historical perspective:

- A key question that has arisen from members of our community is how an entity as well endowed as FAS could have the structural financial challenges that currently exist.

- In the following slides, four key factors will be reviewed. They correspond to decisions and investments made prior to the 2008 financial crisis, concerning

    1. Space
    2. Ladder faculty size
    3. Financial aid
    4. House renewal

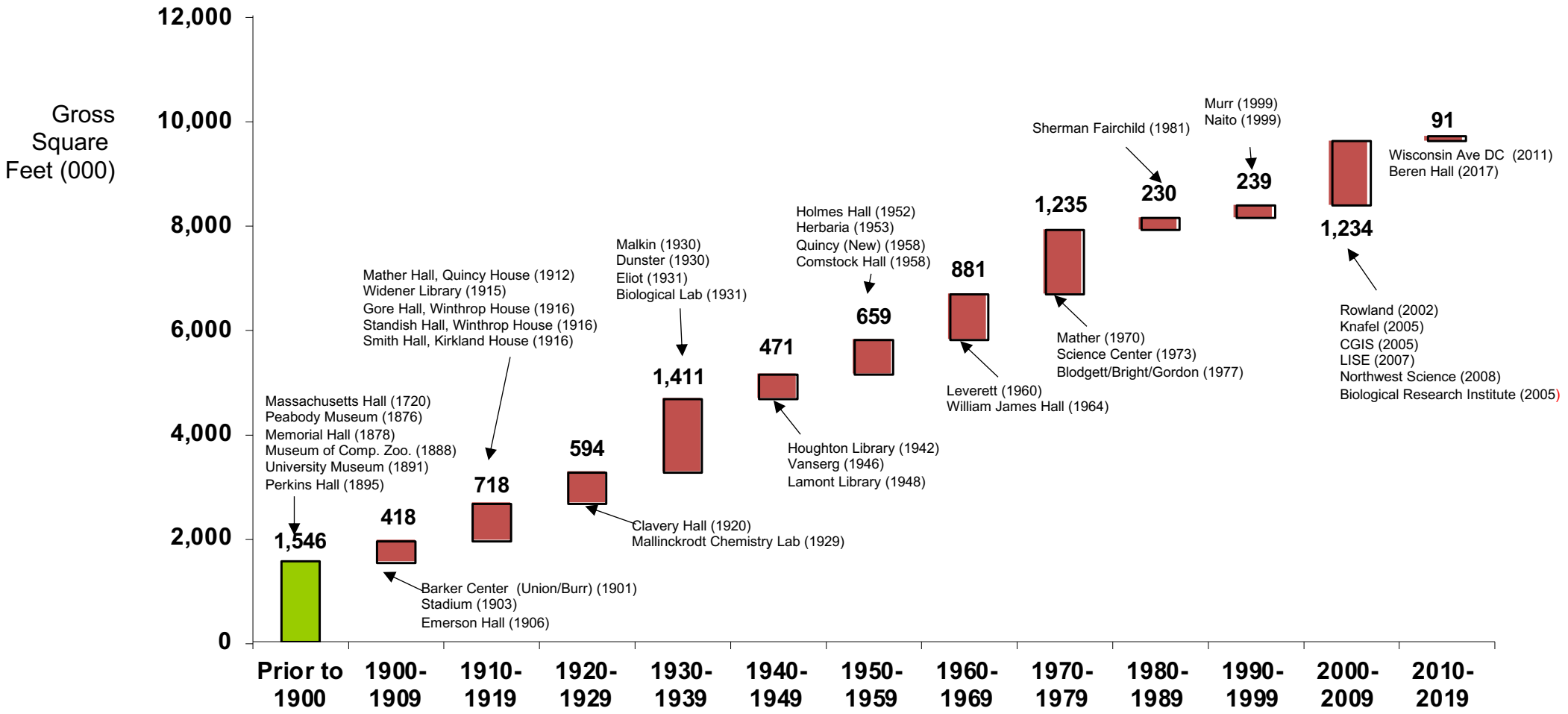
Key Factor 1: Space

- In the first decade of this millennium, FAS constructed or acquired an additional $1.2M square feet, a 14.6% increase over its existing footprint.

- Key drivers of this increase were the construction of six buildings: the Northwest Building, the Lab for Integrated Science & Engineering (LISE), Biological Research Infrastructure (BRI), the Center for Government & International Studies (two buildings, CGIS South and Knafel) and the Rowland Institute. Five of these buildings opened in the eighteen months preceding the summer of 2008.

- These buildings were constructed to high standards and are correspondingly expensive. Their costs are estimated at $23M per year for O&M (operations and maintenance) and $26M per year for debt service.

History of FAS Space Expansion



Note: Excludes SEAS and Harvard Inn (2013)

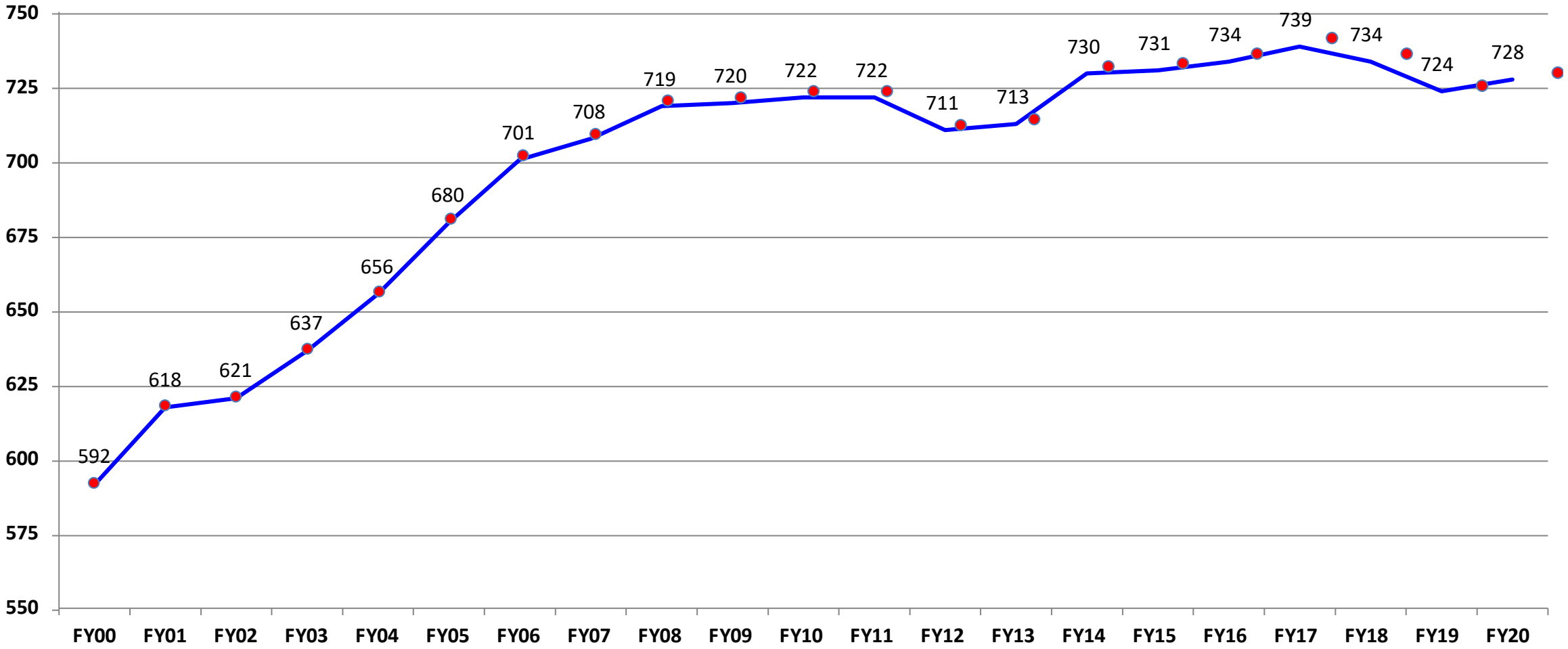
Key Factor 2: Faculty

- Related to the investment in space, the ladder faculty for FAS increased by 130 members or 21% during the same ten-year period (2000 – 2010).

- In FY20, faculty compensation has grown to $197.8M. To calculate the annual impact of this growth in FY20 dollars, 21% of this cost would be $42M.

- The above figure does not include the cost of other investments such as staff support, graduate students and other costs.

FAS Ladder Faculty Growth 2000 – 2020



Key Factor 3: Financial Aid

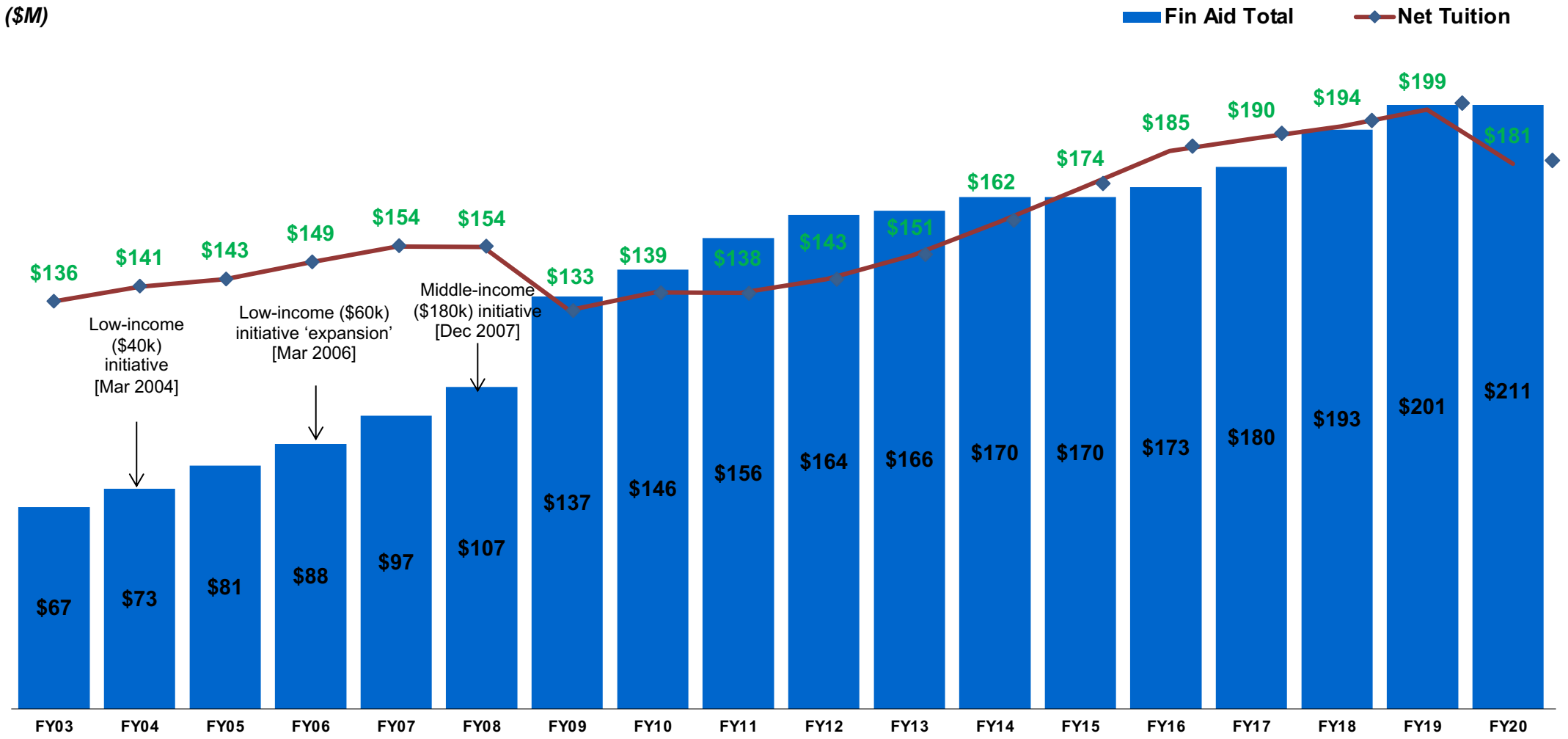
- As summarized in the following slide, the College made three different enhancements to its financial aid policies in three years (2004 – 2007).

- When announced, President Faust described the intent to these changes. "We want all students who might dream of a Harvard education to know that it is a realistic and affordable option. We are determined to do our part to restore education's place as an engine of opportunity, rather than a source of financial stress.…[W]e are not tinkering at the margins, we are rebuilding the engine. This is a huge investment for Harvard."

- As a result, the cost for undergraduate financial aid increased from $67M in FY00 to $211M in FY20, a cumulative annual growth rate of 6.0%.

- To calculate the impact of this growth in FY00 dollars, the FY00 financial aid of $67M was inflated by 4% a year (the approximate increase in tuition during this time). The resulting figure of $147M suggests the cost of financial aid policy changes to be approximately $64M per year.

Growth of Undergraduate Financial Aid 2003-2020



Key Factor 4: House Renewal

- In 2012, FAS began the first phase of Harvard's House Renewal Program consisting of the renovation of eight Neo-Georgian upperclassman residences in the River District of the campus.

- As of January 2021, $1.05B has been authorized to support the completed renewal of Quincy (Stone Hall), Leverett (McKinlock), Dunster, Winthrop and Lowell, and the partial renewal of Adams. The remainder of Adams and full renewal of Eliot and Kirkland remain.

- Based upon the project's scale and scope, the funding had always assumed a mixture of decapped endowments, incremental debt, philanthropy, reserve use, and non-incremental debt, each being deployed at some point during the project. To date, the financial impact of the project is estimated to be approximately $32M per year.

- Without significant philanthropic support, this cost will increase as the project continues through the remaining houses.

RESTRICTED FUNDS

Subcommittee: Stephen Blyth (lead), Jen Dilts, John Campbell, Jeremy Stein, Nancy Guisinger, Pete Sereze

Restricted Funds Working Group

The Aim: Examine Harvard's restricted funds to identify new opportunities to increase the financial nimbleness, adaptability and resilience of FAS, thereby strengthening FAS's academic core, as per Financial Study Group charge.

The Mandate: Think differently; vigorously challenge the status quo; identify and propose principles for usage and governance of restricted funds.

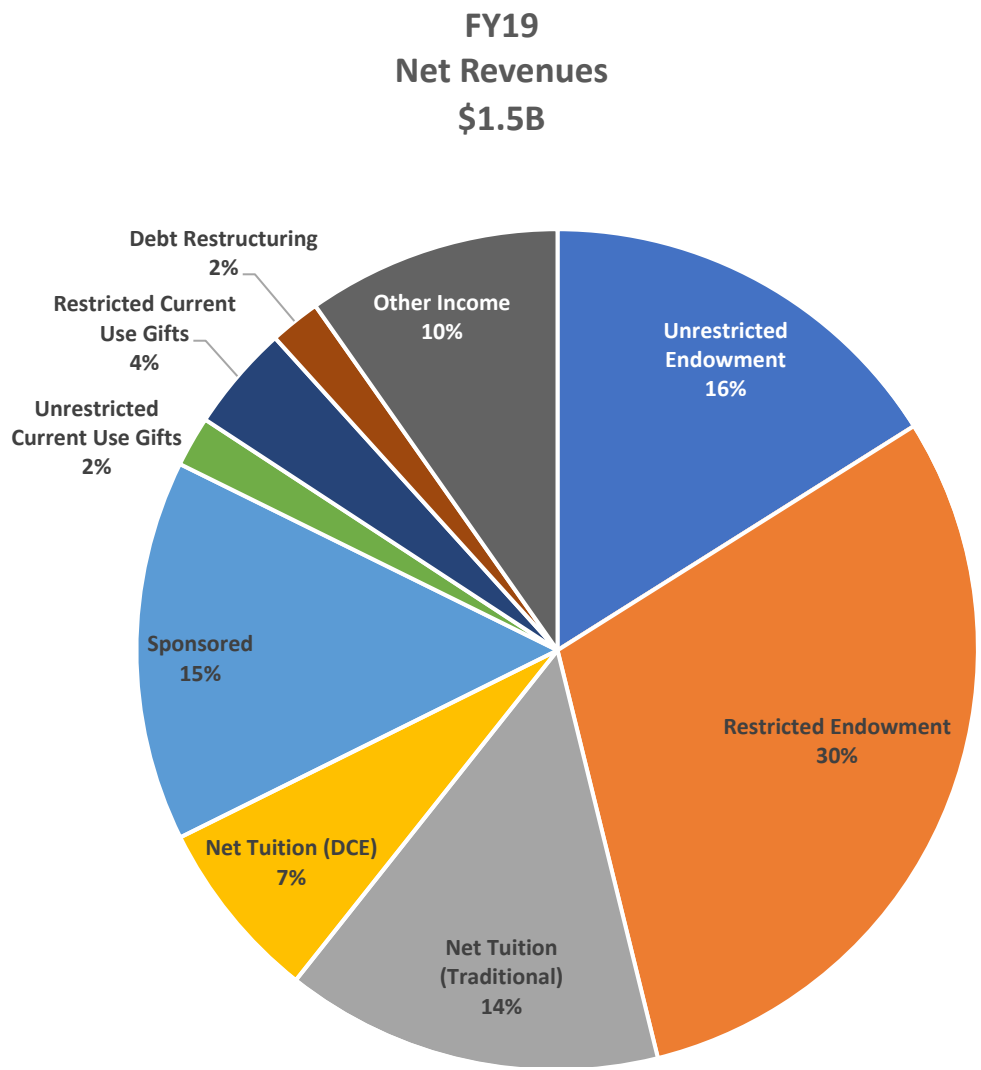
The Group: Stephen Blyth (Statistics), John Campbell (Economics), Jeremy Stein (Economics), Nancy Guisinger (Controller, FAS Office of Finance), Jen Dilts (AVP OFSP), Pete Sereze (OGC).

The Opportunity

Restricted endowment income and restricted gifts constitute 34% (c. $500m) of annual FAS revenue.

65% (c. $12.5bn) of FAS endowment is restricted.

6,200 restricted endowment funds



Summary Fund Data Analysis

- **2,500 funds for undergraduate (2,200) and graduate (300) financial aid, total $3.4bn, UG spend rate 100%**

Remainder:

- **660 large (>$2.5m) funds: total $8.2bn, average spend rate 94%**
- **2,700 small (<$2.5m) funds: total $1bn, average spend rate 81%**

- **$280m unspent balance, 2.2% of total endowment value.**
- **Unspent balance estimated to grow $25-30m per annum**
- **Unspent balance in small funds $72m (6.9% of endowment value)**

Opportunities to Increase Financial Flexibility

Ongoing

- **Maximize uses covered by restricted income**
- **Identify unrestricted usage that can be covered by restricted funds**
- **Identify restricted funds – especially those with low spend rates - that can be directed to core priorities**

One-time

- **Spend down restricted balances**
- **Repurpose or reallocate restricted balances**

Large balances often associated with low spend rates, hence opportunities interlinked

Fund Analysis

Initial Proposal: Select individual funds based on market value, balance, spend rate, age etc; analyze restrictions in depth

Pros: Potential for significant financial impact per fund

Challenges: “Big picture is that there is no big picture” regarding fund restrictions; does not take into account aggregate funding for unit or FAS priorities

Proposal: Select sample departments/centers/units; analyze restricted and unrestricted funding structure and usage

Pros: can identify general principles; aligned with FAS mission; informs further work

Challenges: each unit has own history and idiosyncracies not evident in data; sample not representative; multiple, varied fund restrictions

Case studies follow

Case Study 1: Center XXX

			Restricted Endowment	Restricted Gifts	Unrestricted Center	Unrestricted FAS	TOTAL FY 2019
Income	Current Use Gifts			4,243,472			4,243,472
	Investment/Interest Income		240,929	381,770	511		623,209
	Internal Transfers to other Units		(76,067)	(1,348,580)			
	Other Income				328,025	117,065	445,090
Total Income			164,862	3,276,661	328,536	117,065	5,311,771
Expenses	Salaries	Faculty Salaries+Wages		(337,675)		(2,563)	(340,237)
		Exempt Staff Salaries+Wages		(321,709)		(66,536)	(388,245)
		Union Staff Salaries+Wages		(85,494)	(142,619)	-	(228,112)
		Temp Staff Salaries+Wages		(9,007)	(27,904)	-	(36,911)
		Other Salaries+Wages	(65,411)	(540,402)			(605,813)
		Extra Compensation		(13,507)	(1,104)	(100)	(14,710)
	Employee Benefits		(16,614)	(400,620)	(81,609)	(28,233)	(527,077)
	Student Scholarships, Prizes, Awards			(73,060)		(1,000)	(74,060)
	Supplies, Equipment			(96,162)	(12,982)	(6,492)	(115,636)
	Space+Occupancy			(1,150)	(10,840)		(11,990)
	Other Expenses			(210,296)	(123,048)	(8,106)	(341,450)
	Other Transfers			(302,173)	75,000		(227,173)
Total Expenses			(82,025)	(2,391,255)	(325,105)	(113,030)	(2,911,415)
Grand Total			82,836	885,407	3,431	4,035	2,400,356
Unspent Balance Brought Forward			487,142	26,029,587	40,868		
Ending Balance			569,979	26,914,994	44,298		

Case Study 1 Continued

Observations

- **Center uses $117k FAS unrestricted funds, yet has $82k unspent endowment income and $487k unspent balance from prior years.**
- **Restricted endowment funds used for exempt salaries, yet these are also partially funded by unrestricted funds.**
- **Current use restricted gift, result of successful fundraise, provides funds for other areas and surplus each year.**

Further Inquiry

- **Can endowment income cover all exempt salaries, thereby releasing unrestricted funds?**
- **Do terms of restricted gift allow funds to be directed to broader range of expenses?**

Case Study 2: Center YYY

Center YYY Expenses	Restricted Endowment	Restricted Gifts	Unrestricted	Total FY19
Staff Salaries + Benefits	(222,861)	(13,734)	-	(236,595)
Scholarships + Awards	(484,028)	(14,291)	-	(498,319)
Space, Equipment + Supplies	(20,841)	-	-	(20,841)
Travel + Entertainment	(20,730)	(2,250)	-	(22,980)
Other Expenses	(198,749)	(21,780)	(16,000)	(236,529)
	(947,209)	**(52,055)**		**(1,015,264)**

Center YYY Endowment	
Market Value	45,000,000
Unspent Balance	9,250,000
FY19 Income	1,770,000
FY19 Spend	1,120,000
FY19 Spend Rate	63%
FY19 Balance Increase	650,000

Observations

- **Center almost entirely funded by restricted funds, yet annual income from large endowment exceeds expenses, resulting in low spend rate and large, increasing unspent balance.**

Further Inquiry

- **Are there FAS priorities outside center consistent with endowment fund terms, enabling FAS to access unspent balance and income?**

Case Study 3: Small Department ZZZ

Department ZZZ Expenses	Restricted Endowment	Unrestricted	Total
Faculty Salaries + Benefits	(578,349)	(43,253)	(621,602)
Other Salaries+ Benefits	(11,350)	(80,341)	(91,691)
Travel, Other	-	(10,689)	(10,689)
	(589,699)	**(134,283)**	**(723,982)**

Observations

- **Faculty positions funded largely from restricted endowment, but staff salaries mostly from unrestricted funds**

Further Inquiry

- **If faculty positions non-core, do fund terms allow support of faculty in related fields?**
- **If faculty positions are in FAS priority areas, can they be located elsewhere in FAS, and/or can administrative functions be reorganized across departments, to release unrestricted funds?**

Observations: Incentives

- **No current incentive at unit level to use restricted funds when unrestricted available. In fact, incentive to increase control of funds by using unrestricted first.**

- **Implicit FAS budgeting messaging to "preserve" funds; thus low spend rate and increasing balances may be viewed as prudent.**

- **New incentives to use balances or restricted endowments in place of unrestricted must be carefully judged. Dangers of unnecessary spending; penalizing units with successful restricted fundraising etc.**

- **"Financial nimbleness and adaptability" (read: removing funds from certain units) is FAS decision, largely independent of restricted/unrestricted usage .**

- **Financial structure should not be primary driver of FAS core priorities.**

Observations: Decision Making

- **Detailed knowledge of individual funds locally held. Bottom-up action necessary driver**
- **Lack of well-defined, consistent decision-making framework or clear guidance on top-down FAS priorities and initiatives for units**
- **Dean, acting for President and Fellows, has ultimate authority for decision-making, though empirically decision making at local or intermediate level**
- **Diffuse decision-making process – owners, FAS finance, Office of the General Counsel (OGC) and Alumni and Development Services (ADS) – not necessarily well-aligned with FAS goals to increase financial flexibility with restricted fund usage.**

Recommendations (1)

1. Appoint FAS Director of Endowment Funds

- Mandate to increase flexibility of restricted funds and free-up unrestricted funds, with delegated authority of Dean
- Communicates to and ensures adherence of Primary Managing Organizations (PMOs) to FAS principles
- Discusses and audits fund reports from PMOs as part of multi-year planning process
- Broad mandate to analyze data and identify opportunities across FAS
- Authority to approve changes in restricted usage under defined parameters, with advice from Office of the General Counsel (OGC), Alumni and Development Services (ADS) and FAS Finance
- Identifies and reports to Dean on major opportunities for repurposing of funds

Recommendations (2)

2. Publish principles and guidance for PMOs

- **FAS wide expectations and principles for restricted fund usage**
  - Restricted income to be used in full before unrestricted funds
  - Restricted income to be directed where possible to FAS priorities such as financial aid and salaries
  - Restricted balances to be directed where possible to FAS priorities
  - Continued local control of restricted funds dependent on appropriate usage as per FAS principles
- **Metrics for fund analysis and data screens to identify opportunities**
  - Fund taxonomy to identify high-value fund targets
  - Screen for low spend rate, high balances as percentage of market value
  - Screen for expenditures covered by both restricted and unrestricted funds
  - Screen for partially-used restricted funds which only partially cover expenditures
  - Analyze historical variations in restricted funds usage
- **Reviewing restricted funds terms**
  - OGC to provide guidance identifying major categories of flexibility within terms, giving examples
  - Require local units to carry out decentralized review of terms and develop initial recommendations
  - Apply to all restricted funds regardless of spend rate and balance

Recommendations (3)

3. Establish regular reporting of restricted fund use from PMOs to Director

- Current and historical data on use of funds, spend rate and balances
- Review of fund terms using OGC guidelines, with opportunities identified for increasing flexibility
- Discussion of restricted and unrestricted funds part of multi-year planning

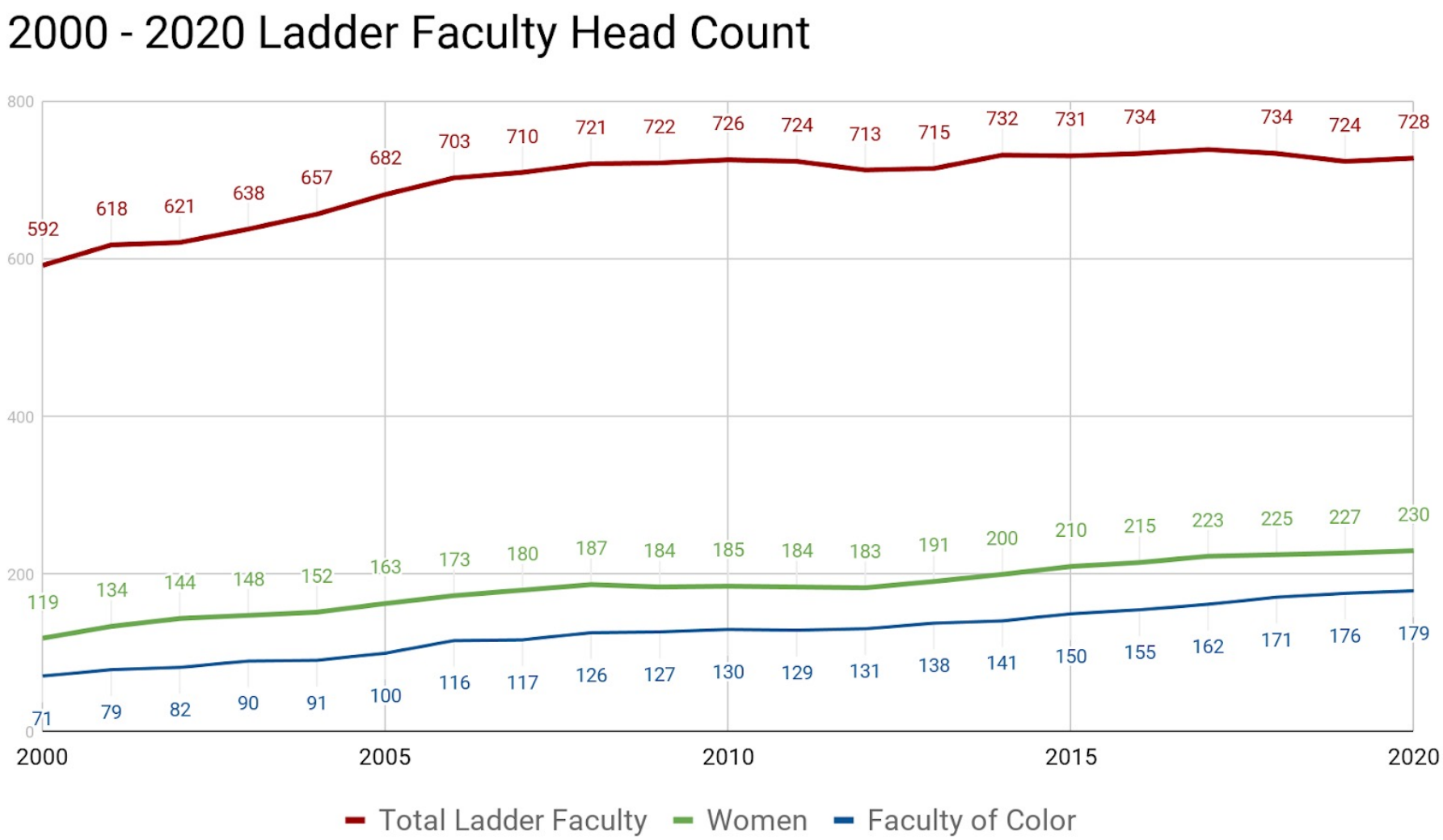
LADDER FACULTY

Subcommittee: Elsie Sunderland (lead), Nina Collins, Michael Desai, Glenda Carpio, Nina Zipser, Jeremy Stein, and Kwok Yu

CHARGE QUESTIONS

1. Is there an appropriate steady state size for the ladder faculty?
2. To maintain a certain size in the ladder faculty, are better incentives for retirement needed, and, if so, what should these be?
3. How do we optimize the composition of the faculty (ladder/non-ladder) and enhance diversity?
4. How do we create a flexible and nimble ladder faculty that is best positioned to engage in the most exciting areas of scholarship and address the most pressing societal issues?

IS THERE AN APPROPRIATE STEADY STATE SIZE FOR THE LADDER FACULTY?



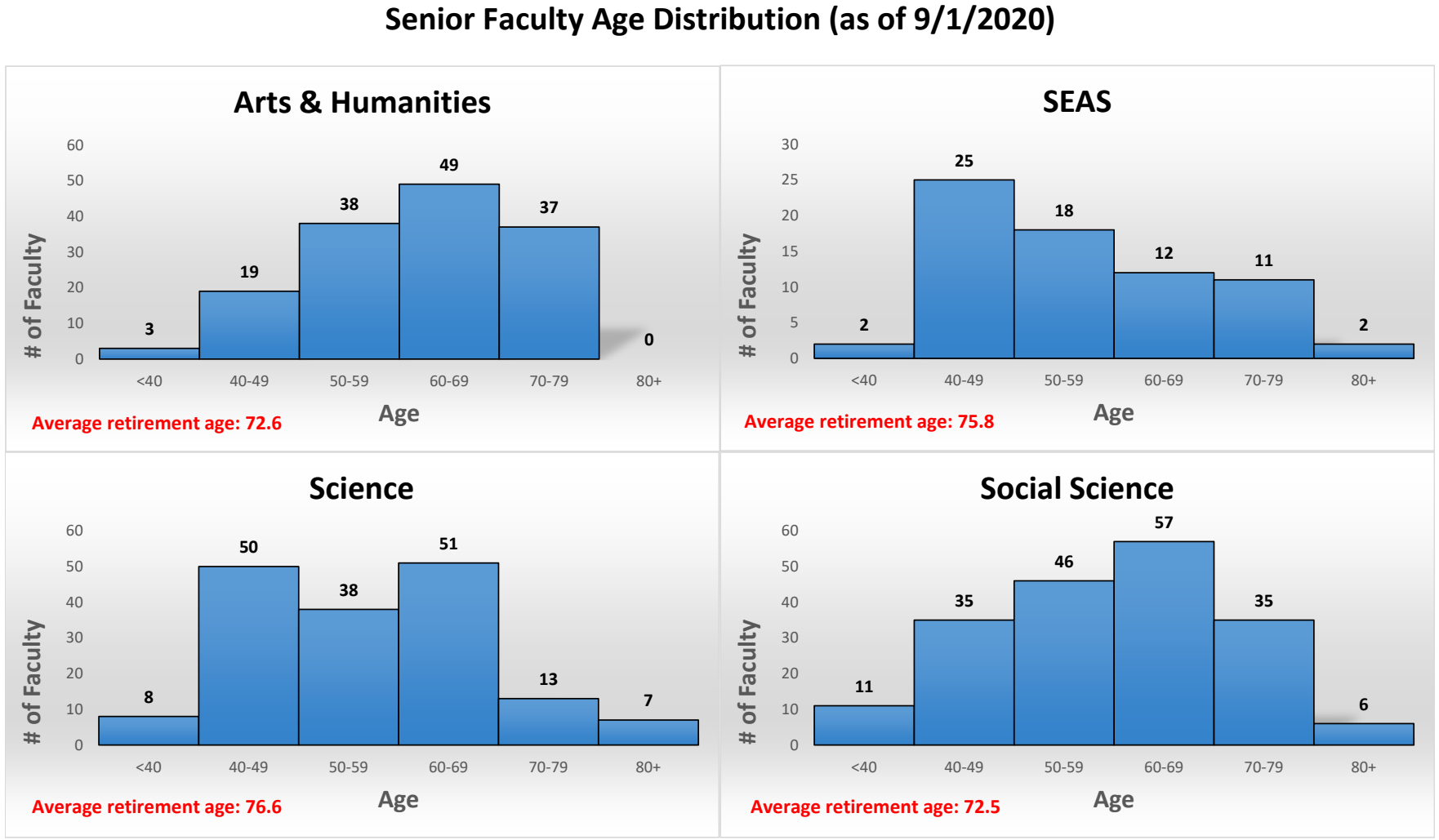
DATA/ANALYSIS: IS THERE AN APPROPRIATE STEADY STATE SIZE FOR THE LADDER FACULTY?

- Faculty size has been stable for the last decade
- Student-to-faculty ratios are high compared to our peer institutions
- Most growth has occurred in SEAS and the sciences intentionally
- The tenure track faculty has shrunk a little over this period (promotions are occurring faster than retirements) – this trend may continue for a while
- Over the last decade, 116 ladder faculty retired and 198 left
- Unlike some other universities, MIT being one example, Harvard does not have a retirement culture and retirement appears to be strongly related to workload (work = retirement)
- Of the 314 ladder faculty who left/retired, 39% were TT faculty, 25% senior faculty who joined other universities; 37% retired
- Departures/churn of faculty is very expensive

RECOMMENDATIONS

- **Recommendation 1: Resist the inclination to cut the ladder faculty size**
- *Rationale:*
- Ladder faculty size has been relatively stable for the last decade
- Growth occurred intentionally in the sciences in the preceding decade (specifically 2000-2008)
- Student-to-faculty ratios are high compared to our peer institutions
- We are close to a steady state in terms of hiring, departures and retirements
- Our steady state size is extremely sensitive to retirements so current rate must be maintained at a minimum
- **Ideally the ladder faculty would continue to grow but reductions may be necessary given financial considerations**
- Choose key areas for research excellence rather than trying to have one person in every area

DATA/ANALYSIS: ARE BETTER INCENTIVES FOR RETIREMENT NEEDED?



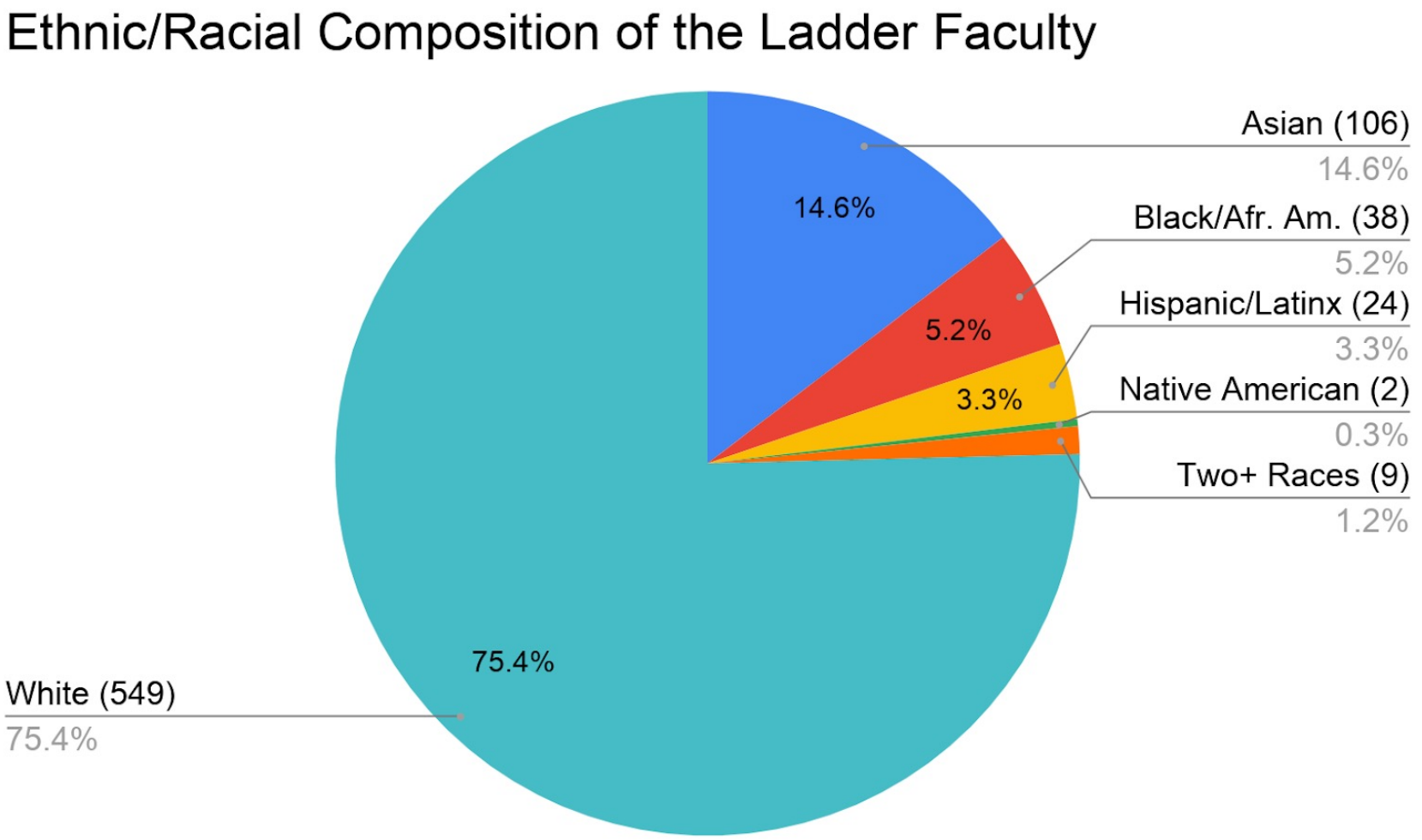
DATA/ANALYSIS: ARE BETTER INCENTIVES FOR RETIREMENT NEEDED?

- Later career stage faculty with very little work have no incentive to retire
- A cultural change ensuring workload is maintained for faculty nearing retirement is therefore important
- Higher teaching loads are correlated to somewhat earlier retirement age
- Some teaching loads are offset because of grant support, but there is no mechanism in place to restore teaching requirements when research productivity declines
- Age is not a good predictor of productivity
- Can we begin a productivity assessment (teaching/mentoring/research) for faculty to ensure better balance?
- Some department chairs are reticent to identify underperforming individuals
- For morale, high performers need to be better rewarded as well

RECOMMENDATIONS

- **Recommendation 2: Create a strong retirement culture for ladder faculty with diminished activity in research, teaching and mentoring**
- Retirements have a positive effect on faculty diversity and new areas of scholarship
- New mechanisms for more intensive review of the faculty activity report are needed to identify high and low performers and flag these for conversations with department chairs and Divisional Deans
- Workload must be maintained for faculty nearing retirement and if research activity diminishes – some offset from the faculty member in terms of teaching could be considered or if performance cannot be brought up to an acceptable level other solutions should be considered
- Mechanisms for initiating conversations about equitable distribution of workload across faculty and retirement are needed (central responsibility of Divisional Dean)
- Current incentives for retirement should be maintained (phased retirement)
- Explore programming that could help create a community for emeritus faculty

DATA/ANALYSIS: HOW DO WE OPTIMIZE THE COMPOSITION OF THE FACULTY (LADDER/NON-LADDER) AND ENHANCE DIVERSITY?



GENDER COMPOSITION OF THE LADDER FACULTY

Division	**% Women**
Arts and Humanities	42%
Social Science	32%
Science	26%
SEAS	19%
Total	**32%**

DATA/ANALYSIS: HOW DO WE OPTIMIZE THE COMPOSITION OF THE FACULTY (LADDER/NON-LADDER) AND ENHANCE DIVERSITY?

- TT faculty proportion shrunk over the last decade (TT is working)
- Faculty hired as full professors are normally in their 50s; this may explain some of the age distribution we see in the faculty
- Of the 316 new hires, 1/3 were senior hires; interestingly these also tend to be more diverse
- Women are still a small fraction of the faculty in the sciences; more even among new hires
- URM are also a small percent of the faculty; we need to build stronger pipelines as well as recruit more effectively from the existing pipeline
- Women and URM are disproportionately burdened with committees and advising responsibilities

RECOMMENDATIONS

- **Recommendation 3: Emphasize diversity in new faculty hires**
- Mechanisms for retaining female faculty are needed such as attractive spousal positions (e.g., Research Scientist track) or half-time for faculty with major care-giving responsibilities
- Ensure that University child-care is available to all faculty and maintain current subsidies for childcare costs, index to increases in costs, and consider additional subsidies for some faculty
- Additional work attracting URMs to apply for faculty positions is needed (see recommendation 4; Conferences/outreach/lectureships for recruiting faculty hires in new fields)
- Hire earlier career stage senior faculty to maximize productive years and start up investment; this may help create a more uniform age distribution among the faculty
- Create data/review mechanisms for ensuring women and URMs who are part of the faculty are not disproportionately burdened with committee work, teaching and mentoring
- Make disproportionate advising burdens transparent

RECOMMENDATIONS

- **Recommendation 4: Innovate in hiring mechanisms**
- Build on recent experiments with hiring new faculty as part of clusters or interdisciplinary units focused on exciting new areas of research; create a climate of collegiality and collaboration
- Encourage some hiring in areas that cut across departments and schools
- Allow more ladder faculty to have flexible affiliations (rather than joint appointments) in more than one School/Department
- Create distinguished visitorships with an emphasis toward diversity that are less expensive than ladder faculty hires to rapidly build strength in specific areas of interest
- Lectureships and visitorships can be useful for familiarizing faculty with new areas of scholarship and for attracting more permanent faculty

DEPARTMENTS

Subcommittee: Gabriela Soto Laveaga (lead), Bev Beatty, Nina Collins, Suzannah Clark, Mark Seibring, Karen Thornber, and Mathilda Van Es

CHARGE QUESTIONS

- As we look ahead to the next 20 years, how can we structure Departments to successfully advance the current, emerging, and anticipated academic ambitions of the Faculty and to respond to changes in student interest? Particularly as academic fields inevitably shift and new areas of inquiry emerge, are our academic structures able to support Harvard to embrace and lead those shifts?
- How could Departments be optimized to meet present and future needs more effectively?
- How can the activities and functions of Departments be made more financially sustainable, as well as more effective in supporting our teaching and research mission?

DATA/ANALYSIS

Currently two models in place in FAS – Academic Departments in the three Academic Divisions and Areas in the School of Engineering and Applied Sciences (which became a School in 2007)

- 19 Arts & Humanities Departments, 10 Social Science Departments, 10 Science Departments
- 8 SEAS "areas" that serve many of the same functions but also collaborate across disciplines in some activities

There are **very few new Academic Departments (Stem Cell and Regenerative Biology and Human Evolutionary Biology are the most recent additions)**. The majority have been in existence for decades, with much of the current landscape having been solidified around the middle decades of the 20th century.

- In the Arts and Humanities in particular, certain geographic or linguistic boundaries of departments may be out of step with contemporary disciplinary priorities and areas of faculty and student interest.
- The Arts & Humanities Division, with its near exclusive adherence to either a disciplinary or a geographic/linguistic basis for departmental identity, can be at a competitive disadvantage as Harvard seeks to recruit graduate students and faculty working across the boundaries of discipline and region – 'where do they fit?'
- There is a tension between career and promotion processes in core subfields and a hunger for interdisciplinary research and teaching.

DATA/ANALYSIS

There is no clearly articulated, consistent understanding of the core functions of Academic Departments.

Hodge podge in the faculty imagination, but is this really the right stuff?

- **Discipline**: Foster intellectual community and scholarly cohesion; create an identity of the field for the world at large; sustain tradition ("guardians of the flame") with legacies, standards of quality; harbor infrastructure, including journals in the field, specialized libraries
- **Academic Programs:** Oversee the undergraduate concentrations and graduate programs; set degree requirements
- **Curriculum:** determine curriculum; allocate time and effort of faculty; create non-ladder budgets as related to curricular need
- **Faculty:** Request and conduct searches; oversee promotions and reviews; mentor and support tenure-track and non-ladder faculty
- **Administration:** Provide financial and logistical support for meetings, travel, and faculty and student events; manage and oversee staff in the department and help support their professional development; enforce but also mitigate FAS-level rules (class schedules, teaching obligations, faculty supervision/discipline)

DATA/ANALYSIS

The structure and funding of Academic Departments also varies rather widely.

- **Size:** there are departments with fewer than 10 faculty and a sole administrator and others with dozens of faculty and a differentiated administrative structure with expertise in finance, grants administration, student services, and other areas (staffing ranging from 1 to 122 FTE).
  - There is some evidence that departments smaller than 10 faculty are unstable and impose a disproportionate administrative burden on faculty.
  - Anecdotal evidence from deans suggests a healthy number at 25-30 faculty per department.
  - Recent reviews of administrative functions have created some administrative shared service units that serve Departments across a Division.
- **Funding:** some Academic Departments benefit from sizeable restricted endowment funds with considerable (and growing) balances
  - The largest restricted endowment fund balance in a department is more than $2m; the highest amount of departmental restricted endowment per ladder FTE is nearly $150k. By contrast, the smallest departmental restricted endowment balance is less than $10k; the lowest amount per ladder FTE is under $1k.
  - Well-funded departments have more opportunities for undergraduate and graduate students (e.g., research trips), creating educational disparities between departments.
  - In these departments, Faculty positions are often funded largely from restricted endowment, but staff salaries mostly from unrestricted funds; there may be room to have staff salaries more fully funded out of restricted endowment.
  - Can administrative functions be reorganized across departments to release unrestricted funds?
  - There are also equity concerns for Departments that do not have access to substantial restricted funds.

DATA/ANALYSIS

FAS Ladder Faculty			
Division	MIN	MAX	Median
Arts and Humanities	0.5	28	8.25
Sciences	8.5	34.25	18.31
Social Sciences	1.5	50.5	18.75
ALL FAS Faculty			
Division	MIN	MAX	Median
Arts and Humanities	1.25	40.9	16.1
Sciences	1.88	48.5	22.13
Social Sciences	7	57.88	24.63

DATA/ANALYSIS

Primary, Joint and Allied Concentrators								
2019-2020					2020-2021			
Division	Smallest	Largest	Median		Division	Smallest	Largest	Median
HUM	3	188	38		HUM	3	108	18
SCI	21	262	82		SCI	13	239	73
SEAS	23	555	82		SEAS	12	400	63
SOCSCI	42	612	139.5		SOCSCI	38	483	110

DATA/ANALYSIS

Ladder Faculty:Staff Ratio as June 30, 2020				
Division	Smallest	Largest	Median	
Arts and Humanities	0.00	9.00	2.48	
Sciences	2.92	5.18	0.79	
Social Sciences	0.00	3.85	1.55	
All Faculty:Staff Ratio				
Division	Smallest	Largest	Median	
Arts and Humanities	0.69	16.60	4.23	
Sciences	0.00	5.68	0.82	
Social Sciences	0.81	4.11	2.44	

OBSERVATIONS/PRINCIPLES

- Academic Departments should be flexible, intellectually and financially nimble, and capacious enough to sustain and support emerging areas of interest and should help, not hinder, our ability to hire the most exciting talent on the academic market (competitive issue).
- Of particular need are structures that have the intellectual and financial resources to enable recruitment, research, and teaching that reach across disciplines.
- Small changes should be normalized but structural change is hard – the next evolution in structure should enable our community to do its best work for the next 20 years.
- Organizational change should be centered around an academic vision for how to support excellence in the pursuit of the mission of teaching and research, which may vary by academic division.
- Any reorganization will disrupt some forms of intellectual community, but will enable us to be more dynamic, vital, and forward-looking as a community.

RECOMMENDATIONS (IMMEDIATE)

- Launch Divisional/SEAS strategic planning process on the future of FAS academic structures.
  - *What academic structures will enable the Faculty to do its best work and to attract the most exciting faculty talent for the next 20 years? What are the barriers we confront today in our pursuit of excellence in teaching and research?*
  - *Revisit Departments that are smaller than 10 faculty FTEs or that have small undergraduate enrollments.*
  - *Revisit Departments with substantially overlapping faculty membership and student interest.*
- Building on earlier reviews, look for further opportunities to elevate admin functions from Departments to shared service organizations.
- Building on earlier studies, learn from past experiences of change in our academic structures and employ best practices.
- Review Departmental budgets to identify opportunities to apply restricted funds to a broader set of Departmental costs and to purchase services from shared service orgs.

RECOMMENDATIONS (MIDDLE TERM)

- Establish a more principled model for the administrative support that faculty receive across Divisions and SEAS
  - *Prior programs (TAD in DOSS, for example) resulted in uneven staffing even in like disciplines.*
  - *Further unevenness comparing Science/SEAS and DOSS/A&H.*
  - *Most Humanities faculty have no dedicated staff (social sciences have a combo).*
  - *Providing appropriate administrative support to faculty with large citizenship burdens could support recruitment and retention of women and URM faculty who face increased student support and university service demands.*
- Address disparities in funding that leave some Departments unable to meet core departmental administrative, curricular, and training needs.

CENTERS

Subcommittee: Suzannah Clark (lead), Bev Beatty, Nina Collins, Gabriela Soto Laveaga, Mark Seibring, Karen Thornber, Mathilda Van Es

CHARGE QUESTIONS

- What is the unique role that Centers play in advancing the teaching and research missions of Harvard?
- To what extent do Centers deploy their resources in direct support of Harvard's core mission activities of teaching & research?
- How can Centers best support Harvard faculty members in their creation of new knowledge; how can Centers best support undergraduate and graduate student learning and research?
- Are Centers financially sustainable for the long term?

DATA/ANALYSIS

- Nearly 60 centers based in the FAS

  Of those, 41 are research centers (University-wide Centers are counted with their closest Division):

  - Sciences/SEAS: **18 Centers**
  - Social Sciences: **16 Centers**
  - A&H: **7 Centers** **Total: 41 (full list in Appendix)**

- Primary types of Centers:
  - service/infrastructure providers: shared-use core facility
  - research/scholarship with identifiable focus (our subgroup's main focus)
  - museums/collections
  - rare: host and oversee degree programs (e.g., Regional Studies—Middle East)

DATA/ANALYSIS – *CONT'D*

- Total Center spending in FY19: $161 million.
  - Of that amount, $12.6M was direct FAS subvention to Centers.
  - Some research centers contribute some amount toward underwriting their space costs but no FAS research centers currently cover the full costs of their space (unlike centers at HKS, for example).
- Centers vary greatly in the percentage of their spending devoted to directly funding undergraduates and graduate students (e.g., research/travel grants, financial aid – tuition, living expenses, research assistantships).
  - Percentage of Center budgets spent on scholarships and awards varies from 0 to 50%, with the average being 8%.
- Centers vary greatly in the percentage of their spending devoted to directly funding faculty research (e.g., offering research grants for which faculty across FAS/the university can apply; funding of faculty research materials, research travel, research assistantships, etc.).
- Centers vary greatly in the percentage of their spending devoted to staff salaries and benefits (from 9% - 48%).
  - Research centers spend $35.5M annually on staff salaries. $5.3M is supported by FAS subvention.
- Centers vary greatly in their ratios of restricted to unrestricted funds; they vary as well in how flexibly they use restricted funds.

DATA/ANALYSIS – *CONT'D*

• Number of Research Center Staff Position FTEs per Division (does not include SEAS) as of June 2021:

Division	Filled	Vacant	Total
Arts and Humanities	117.07	17.10	134.17
Sciences	122.26	21.23	143.49
Social Sciences	160.31	22.39	182.70
Total	**399.64**	**60.72**	**460.36**

OBSERVATIONS/QUESTIONS

- To fulfill their particular role in the intellectual life of Harvard, Centers should retain intellectual integrity and distinctiveness while also achieving deeper integration into the academic mission of the FAS.
- Centers (particularly international and area centers) bring pride and benefit to Harvard, particularly in faculty recruitment, but are underutilized in interdisciplinary program building and academic decision-making. How might they be more intellectually and financially engaged to directly support the major strategic objectives and core academic mission of the FAS/University?
- Are Centers focused on funding opportunities that match (1) the faculty's most pressing needs? (2) FAS's needs/priorities?
- How can Centers maximize direct support of faculty and students, attain greater efficiency, and reduce overhead? How can Centers evolve to reflect changes in Harvard's academic landscape?
- How could Center programs and activities be more tightly integrated with Departments to support intellectual communities within and across Departments? How can Center programs and available funding become more easily discoverable for faculty and students?
- Many of the Centers have been part of the Harvard landscape for decades. Is there an appetite to evolve structures or reframe areas of focus? Are there opportunities to share administrative support structures across Centers?
- To what degree are the *Provostial Principles for the Establishment of New Centers* (Nov. 2002) still current? Are these principles helpful/followed during the establishment of new centers and in ensuring the productive continuation of existing ones?

RECOMMENDATIONS (IMMEDIATE)

- Engage faculty leaders of Centers directly in:
  - The Divisional/SEAS strategic planning process on the future of FAS academic structures outlined by the Departments subcommittee.
  - Interdisciplinary program building and new faculty hires to complement disciplinary programs of Departments. Approaches will vary by Division/SEAS.
  - Engage Centers more directly in FAS, Divisional, and Departmental academic planning to identify and support shared priorities and needs. Examples include grad/undergrad financial aid, faculty compensation (such as named Chairs; research funds), faculty and student research/travel grants, speaker series, etc.
  - More formal coordination with GSAS and Harvard College in funding student programs and support.
  - Reviewing terms to identify opportunities for restricted funds to be used more broadly to support shared academic priorities, in partnership with the Director of Endowment Funds.
  - Attaining greater administrative efficiency and reducing overhead in part by identifying opportunities to achieve economies of scale across Centers through shared service units offering specialized support for common needs.

RECOMMENDATIONS (CONT'D)

- Engaging Centers in becoming financially sustainable, to include fully covering their total space costs with local funds. This process would draw on work by the Space study group, which has made recommendations for how to create a consistent "shadow price" system for space.
- Identifying opportunities to better support faculty directors, given their many other time-consuming responsibilities on campus and in the profession.
- Support Centers in evolving to reach new areas of interest or to restructure around shared topics, consistent with and directly supporting Harvard's teaching and research mission.
- Develop a handbook in partnership with Centers to provide guidelines to encourage (1) accountability toward core mission activities of both the Centers and the overall mission of their division/school/University and (2) high impact spending that is focused on core mission activities. Going forward, **one of the criteria of (re)appointment for center faculty directors and executive directors must be the understanding that collaboration and partnership on the above with the Academic Divisions and with FAS leadership is a core responsibility of their role.**
- Compensation for Center faculty directors has moved toward tiers, depending on the nature of a Center. Standardization is preferable over individualized negotiations. Therefore, tiers should be thoughtfully determined and any further variation beyond tiers should be avoided.

GRADUATE SCHOOL OF ARTS AND SCIENCES

Subcommittee: Michael Desai (lead), Jen Dilts, Glenda Carpio, Elsie Sunderland, Karen Thornber, Allen Aloise, and Geoff Tierney

CHARGE QUESTIONS

1. What is the appropriate structure for graduate programs at Harvard?

2. How do we determine program sizes to align with research and other institutional priorities?

3. How can we improve graduate program outcomes?

4. How can we improve the financial viability of GSAS?

OBSERVATIONS/PRINCIPLES

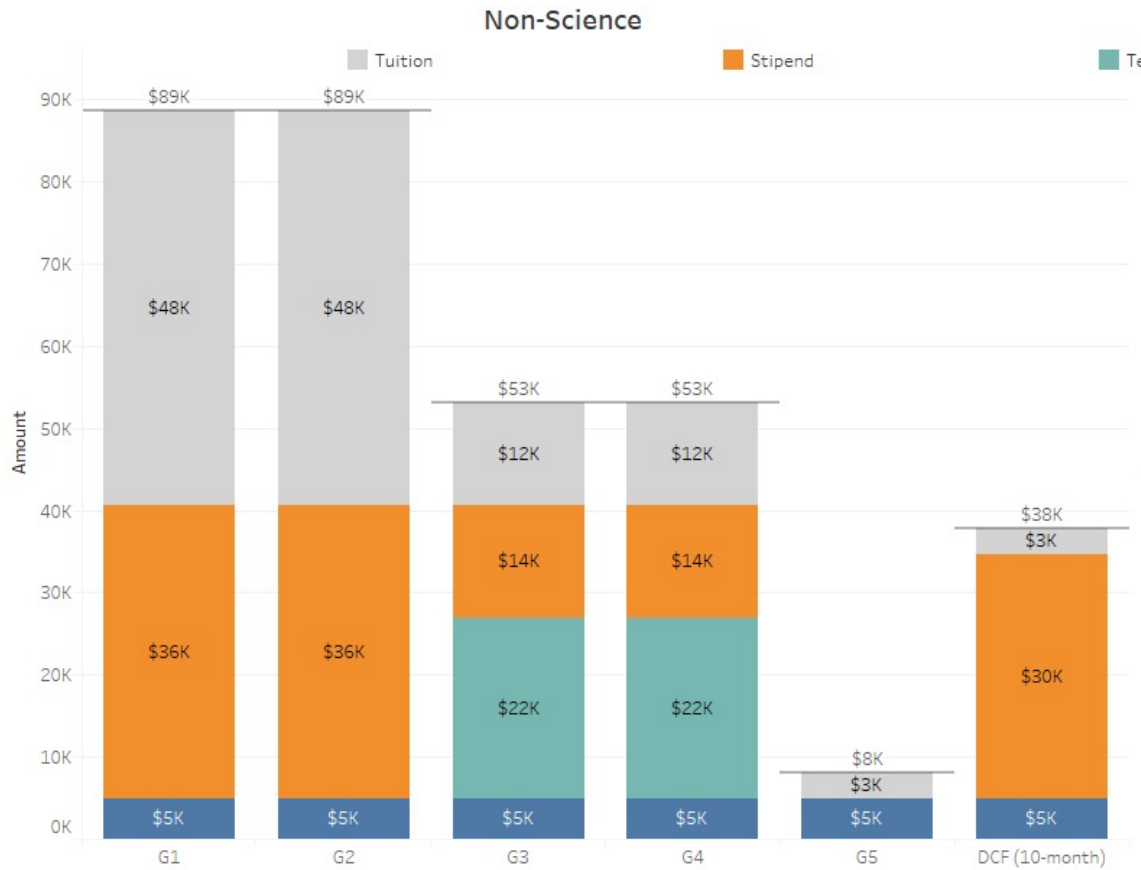
- Graduate students are central to the mission of the university

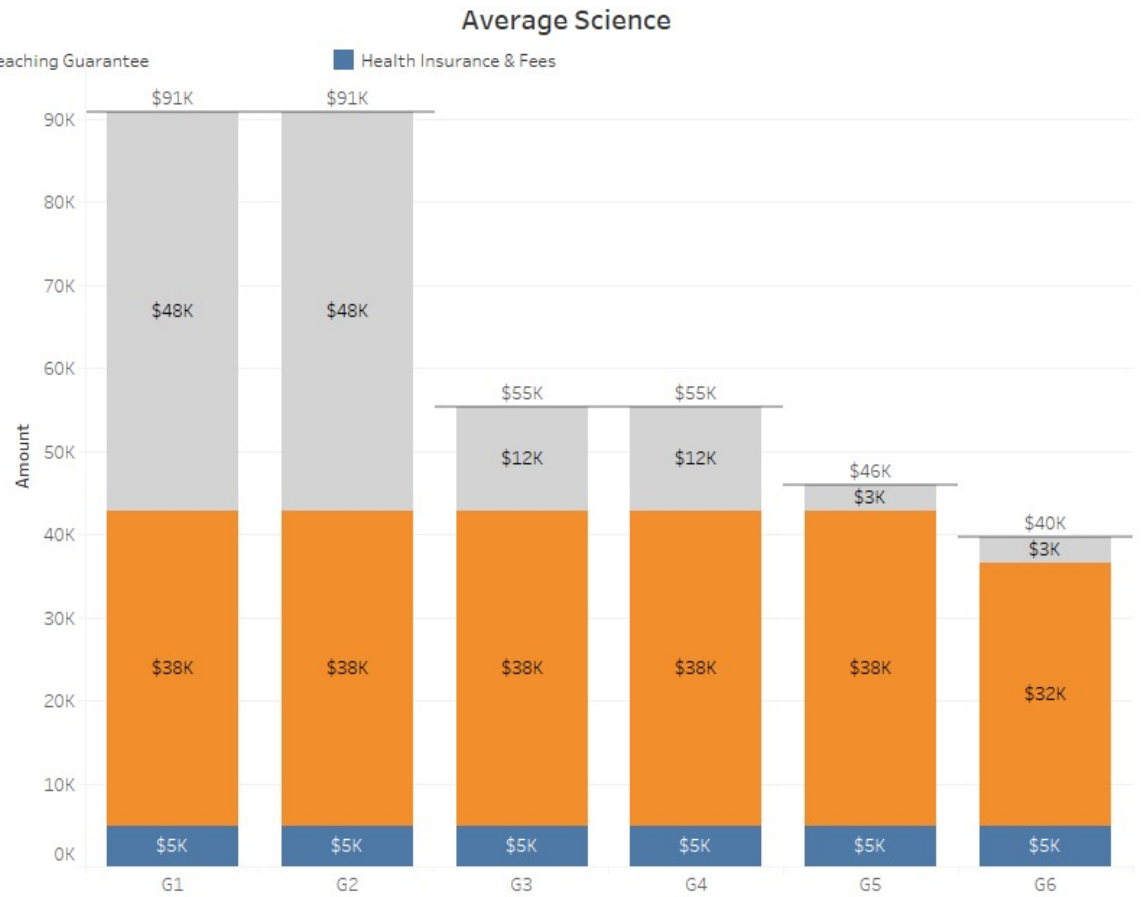
- Goal is to change program organization, size, and admissions processes to:
  - Enhance flexibility
  - Better align with research priorities and changing/emerging fields
  - Improve efficiency
  - Ensure a climate where graduate students can thrive

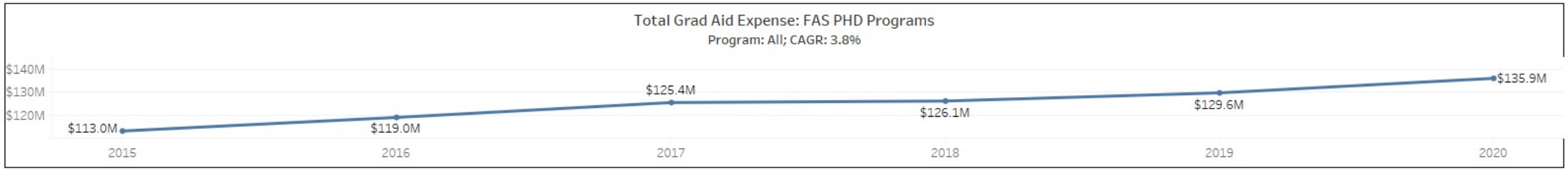
- GSAS costs have and will continue to increase faster than corresponding external funding sources

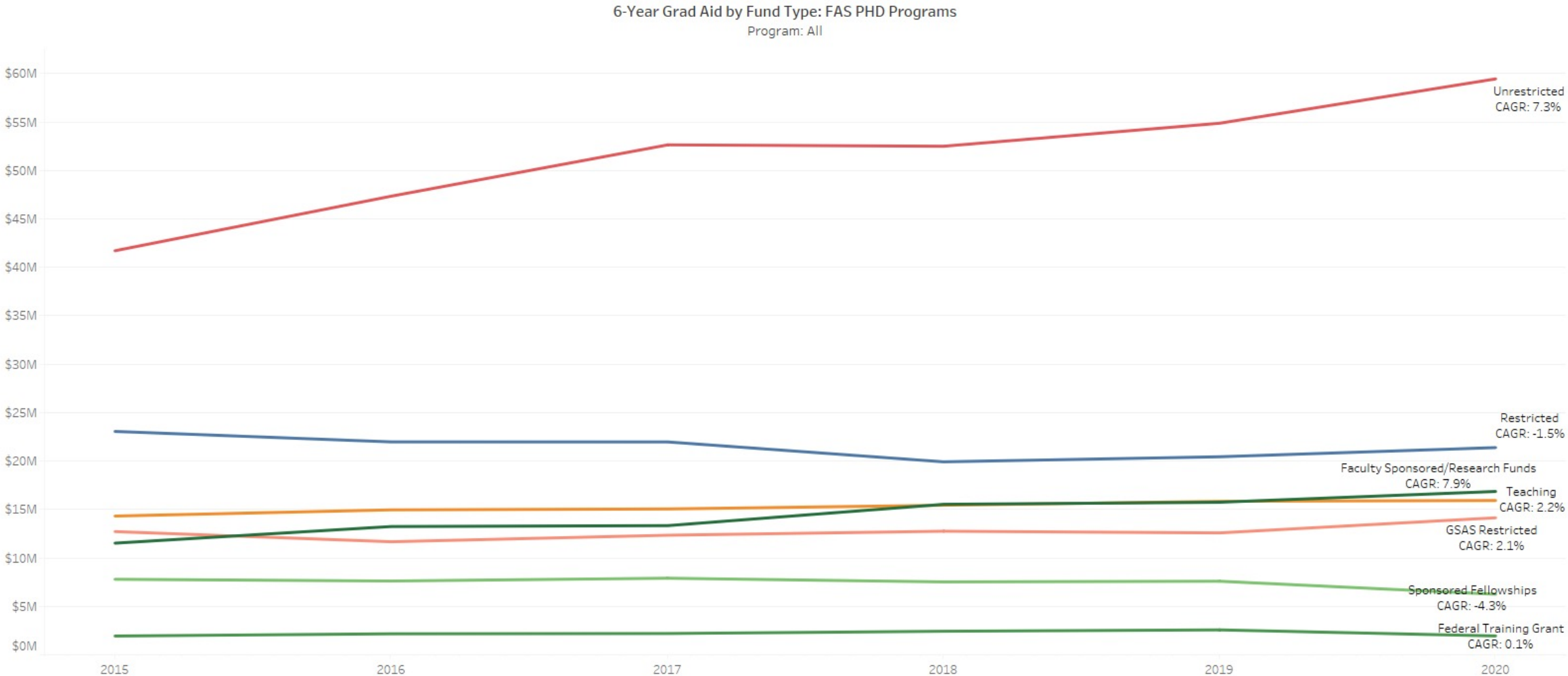
- Changes and cuts will have broad impacts. Transparency in decision making is critical

DATA: COSTS PER STUDENT






Total Grad Aid Expense: FAS PHD Programs
Program: All; CAGR: 3.8%
$140M
$130M
$120M
$113.0M
$119.0M
$125.4M
$126.1M
$129.6M
$135.9M
2015
2016
2017
2018
2019
2020


6-Year Grad Aid by Fund Type: FAS PHD Programs
Program: All
$60M
$55M
$50M
$45M
$40M
$35M
$30M
$25M
$20M
$15M
$10M
$5M
$0M
Unrestricted
CAGR: 7.3%
Restricted
CAGR: -1.5%
Faculty Sponsored/Research Funds
CAGR: 7.9%
Teaching
CAGR: 2.2%
GSAS Restricted
CAGR: 2.1%
Sponsored Fellowships
CAGR: -4.3%
Federal Training Grant
CAGR: 0.1%
2015
2016
2017
2018
2019
2020

RECOMMENDATIONS (SUMMARY)

- Recommendation 1: Reorganize graduate program structures
- Recommendation 2: Change the model for setting program sizes
- Recommendation 3: Prioritize diversity, mentorship, training, and student outcomes
- Recommendation 4: Eliminate barriers to increasing diversity, inclusion, and belonging
- Recommendation 5: Control costs and make graduate education a development priority

RECOMMENDATION 1: REORGANIZE GRADUATE PROGRAM STRUCTURES

- Merge admissions for programs in related areas ("joint committees"). E.g. literatures, life sciences
  - Particular focus on merging admissions for smaller programs
  - Divisional deans decide joint committee structure (which programs merge) in consultation with faculty/GSAS
- Joint committees create more flexible and efficient admissions structure
  - Individual programs can fluctuate within joint committees from year to year (e.g. due to strength of pool)
  - Single point of application simplifies process for applicants
  - Establish cohort building opportunities among students from all programs within a joint committee
  - Work to eliminate financial inequities among programs (e.g. perks such as trips/events) while maintaining individual character of each program
- Periodic review and revisions of the program/joint committee structures
  - Combination of internal and external review processes (e.g. coordinated with departmental visiting committees)
  - Create a culture of flexibility where structures can change to reflect new priorities
    - (e.g. creating/eliminating programs within joint committees)

RECOMMENDATION 2: CHANGE THE MODEL FOR SETTING PROGRAM SIZES

- Replace annual admissions targets with targets for (time-averaged) total program size
  - Programs have flexibility from year to year within bounds of total program size
  - Incentivizes accelerating time to degree and providing off-ramps where appropriate
- Overall total divisional program sizes determined by GSAS and Divisional Deans
- Divisional Deans, in consultation with GSAS, allocate slots among joint committees and set total program sizes
  - Programs manage their total size and coordinate within joint committees
- Periodic review and revisions of program sizes
  - Establish norm that program sizes change with priorities and based on metrics in Recommendation 3

RECOMMENDATION 3: PRIORITIZE DIVERSITY, MENTORSHIP, TRAINING, AND OUTCOMES

- GSAS and Divisional Deans evaluate success of each program in four key areas:
  - Diversity, particularly among underrepresented minority groups
  - Mentorship (quality of advising)
  - Training (quality of coursework and other training opportunities)
  - Outcomes:
    - Time to degree relative to standards in the field
    - Job outcomes relative to Ph.D. training and student goals
- Success by these metrics directly impacts program target sizes
  - Provide programs appropriate tools to enforce standards and expectations for their faculty
  - Regular reviews of faculty advising
    - More clearly define faculty roles and responsibilities and provide periodic feedback to faculty (as with CUE guide)
- Periodic review of successes and failures of programs in each area
  - Transparent process for assessing and communicating strengths and weaknesses
  - Metrics for success can be division and program-specific where appropriate

RECOMMENDATION 4: ELIMINATE BARRIERS TO INCREASING DIVERSITY, INCLUSION, AND BELONGING

- Eliminate barriers that limit the size of the applicant pool
  - Incentives for faculty/programs to conduct outreach to help increase applicant pools
  - Review and evaluation of long-term program success in this area

- Improve recruitment of diverse student population
  - Focus on support of current students to ensure successful outcomes
  - Create incentives for successful mentoring of students from underrepresented backgrounds
  - Practical and financial support to eliminate immediate barriers to recruitment (e.g. related to cost of housing in Boston, etc)

RECOMMENDATION 5: CONTROL COSTS AND MAKE GSAS A DEVELOPMENT PRIORITY

- Costs depend on program sizes and the sources of revenue
  - Student costs are likely to continue to grow (e.g. due to unionization)
  - Program sizes are not large relative to peer institutions
  - Cuts will lead to difficult choices; increasing efficiency is important
  - Shifting costs to other sources is possible but only to a limited extent
    - Fully use restricted funds.
    - Increase and regularize contributions from the Centers.
    - Sponsored funds and teaching have very limited growth potential
- Marginal cost savings of cutting students
  - Marginal cost of a student (distinct from average cost) is defined as the cost of adding/cutting an additional slot from current levels
    - High variability in average student cost due to variations in restricted funds, sponsored support, etc.
    - However, almost all programs fully use restricted funds; adding/reducing program sizes primarily affects unrestricted funds
    - Adding/subtracting a student will shift allocations of sponsored funds and teaching support to offset (e.g. faculty will hire postdocs instead, teaching allocations are full in some areas)
  - Rough estimate of marginal costs by division (see data for key assumptions):
    - Humanities and social sciences: $30k per student per year
    - Sciences and SEAS: $15k per student per year

RECOMMENDATION 5: CONTROL COSTS AND MAKE GSAS A DEVELOPMENT PRIORITY

- Establish target divisional graduate student sizes in light of marginal costs and overall priorities
  - GSAS total size is ~2500 students.
    - 10% cut at average ~25k/student marginal savings is ~$6M annual savings
    - 20% cut at average ~25k student marginal savings is ~$12M annual savings
  - Use recommendations 1-3 to distribute any cuts as efficiently as possible
    - Note also that marginal savings from program size reductions is less in the sciences
- Make fundraising for GSAS a development priority
  - GSAS cost per student will continue to grow
  - External sources of support are unlikely to keep pace
  - Students play a critical role in research; any reductions in size will impact competitiveness
  - New philanthropic gifts will be key to long-term viability
    - Peer institutions have had success attracting major donations for this purpose

SPACE

Subcommittee: David Parkes (lead), Jay Herlihy, Stephen Blyth, Leslie Kirwan, Jeremy Stein, Zachary Gingo, Russ Porter

CHARGE QUESTIONS

- Where are the largest untapped opportunities to reduce the cost to the FAS of space?
  - Can we better communicate the cost of space to end-users?
  - Can incentives be introduced to promote the better use of space?
- As we recover from the global pandemic, are there particular opportunities to reboot our space use?
  - How can we best leverage the work done by the University Committee "Workforce of the Future"?
- What constraints and challenges does the FAS face regarding our use of space? How can we organize our space, best govern our space?

DATA/ANALYSIS

- Growth & Evolution of FAS-Owned Space
- Breakdown of FAS Space by Type (Academic, Residential, Athletics & Support)
- Review of Growth of Space Budget (Operating & Capital) from FY 09 – FY 20
- Review of FAS Leases (External & Internal)
- Review of Different Rent Methodologies Employed Across FAS & University (HRES)

FAS-OWNED AND RENTED SPACE (2020)

FAS owns 268 buildings, comprising 10.1 million gross square feet

- **Academic: 5.3 million GSF**
- **Residential: 3.5 million GSF** (13 Houses, 17 Freshman Dorms, 4 Graduate Student Dorms)
- **Athletics: 0.8 million GSF**
- **Support**: **0.6 million GSF** (performing arts, student activities, administration)

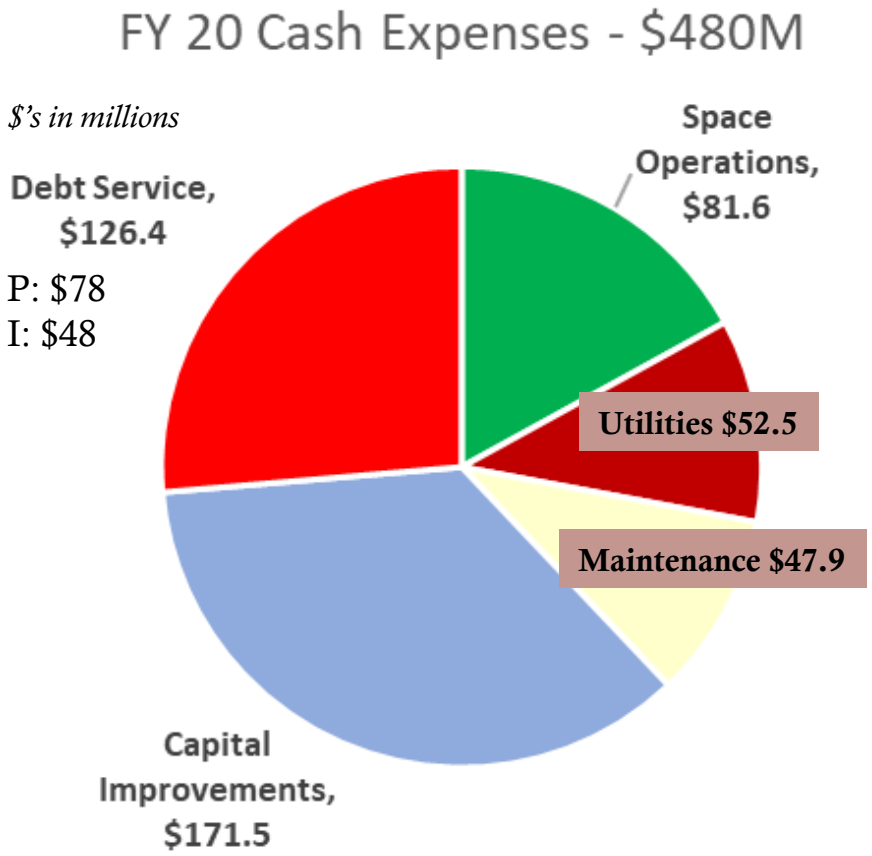
FAS (including SEAS) rents

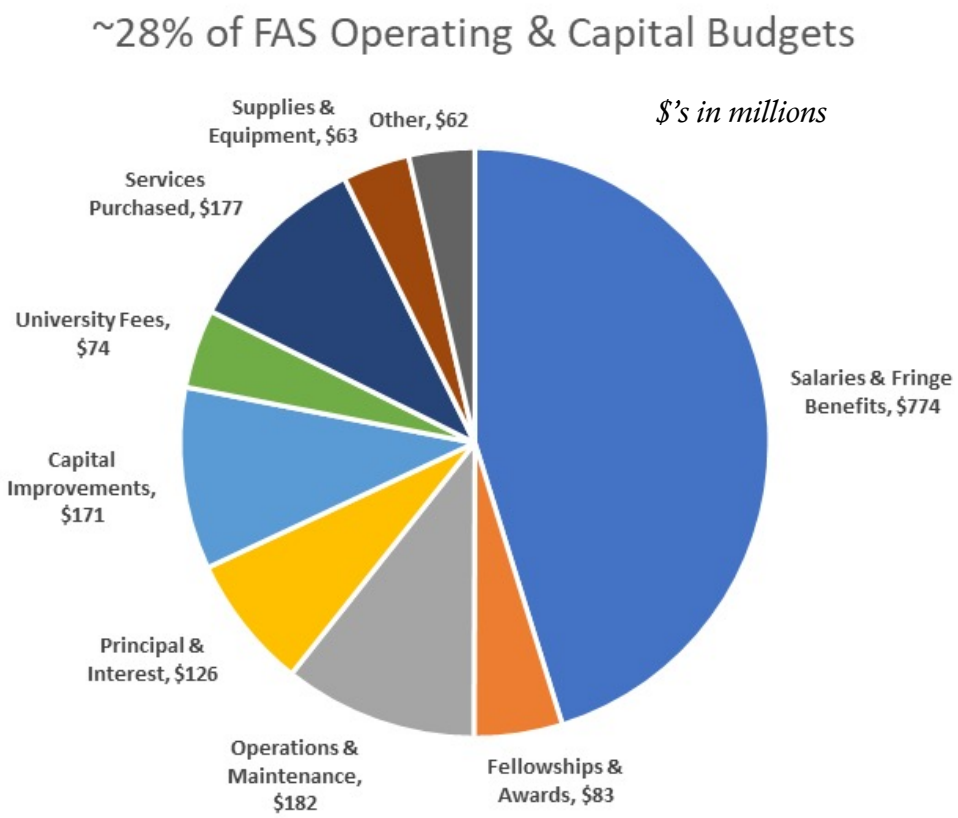
- 714,000 nsf, of which 420,000 nsf is non-residential (= **11% of the FAS' owned, non-residential, non-athletics space**)
- 294,000 nsf of rented space is residential (= **13% of FAS' owned, residential space**)

SEAS also rents additional space

- 370,000 nsf, comprising the new SEC building in Allston

CASH EXPENSE IN THE CONTEXT OF FAS BUDGET





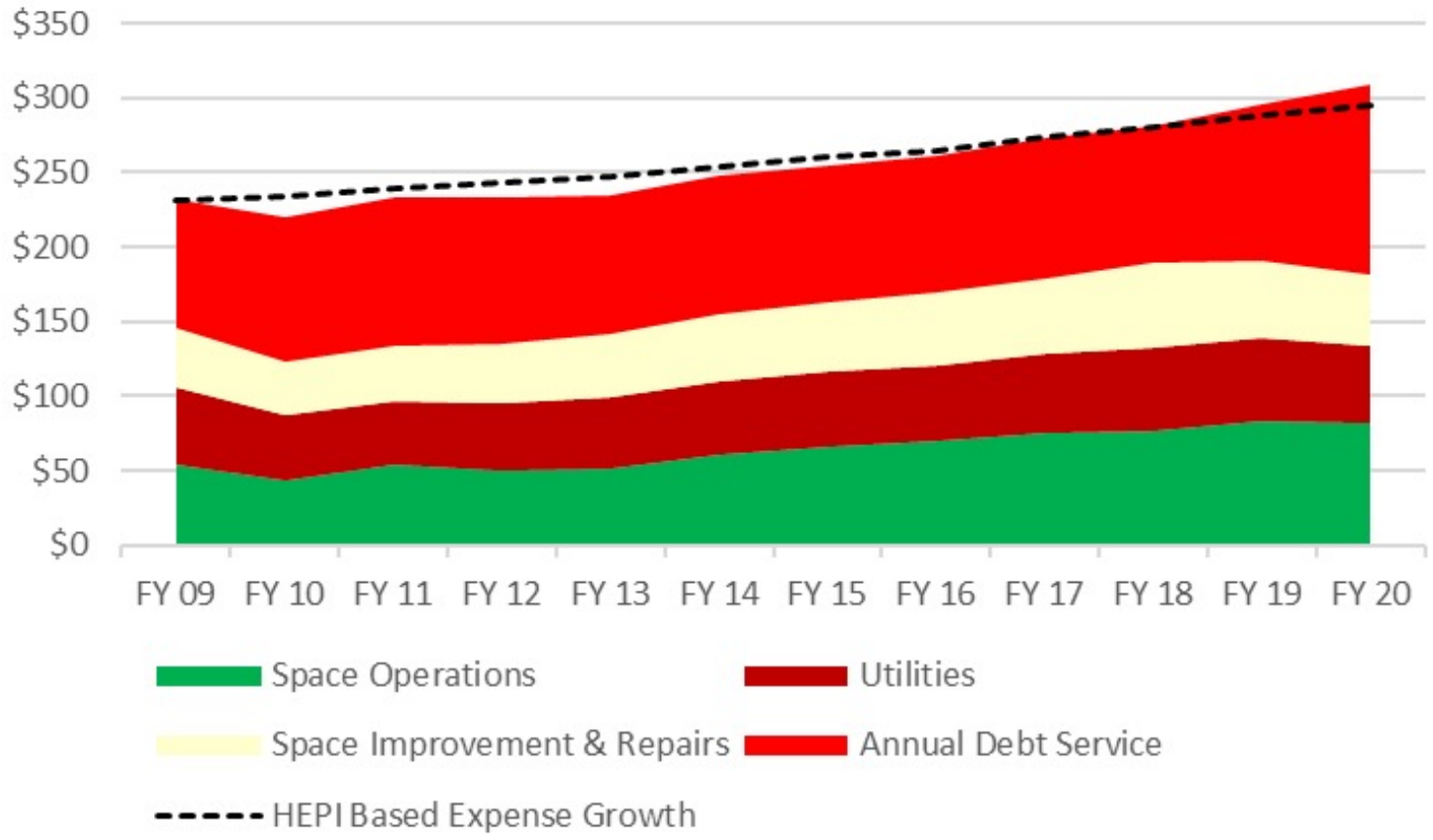
- **$8B value of real estate, $1.2B debt**
- Not including capital improvements, cost is equivalent of **$44/nsf-year** (includes lab operation cost)
- **Saving $10M/yr is ~340,000 gsf**, or **5.4% of owned, FAS+SEAS non-resid., non-athl. space** (c.f., Max. Dwork. 100,000 gsf)

- Annual rent paid by FAS (non SEAS) for space is **$27M/yr** ($20M internal), comes to **$37/nsf-year**
- SEAS also rents 370,000 nsf (SEC), at **$15M/yr** (+$14M/yr in operating costs)

Data includes SEAS & FAS
Rent included in space operations

CHANGE IN FAS CASH EXPENSES, SPACE: FY'09-FY'20

$'s in millions

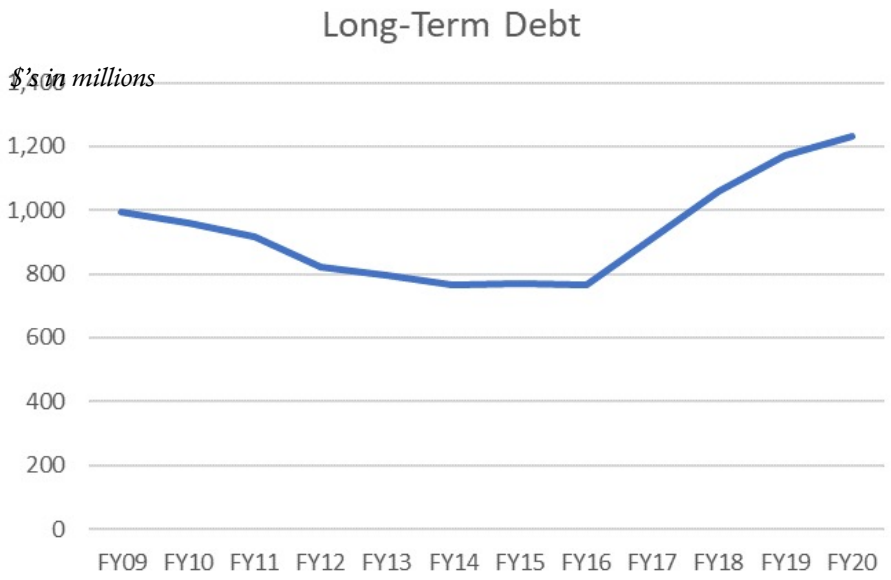


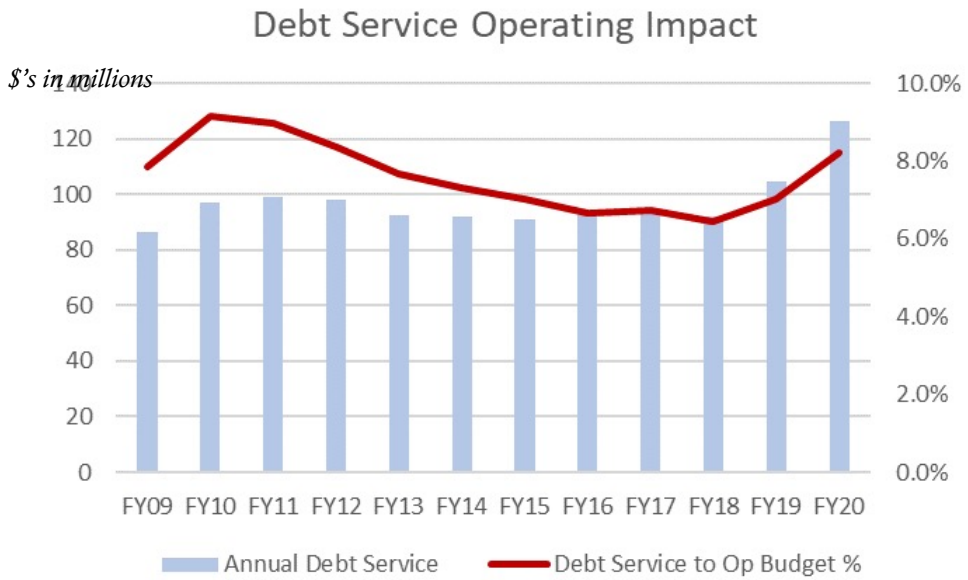
- HEPI (Higher Education Price Index) tracks the main cost drivers in higher education. Trend line shows trajectory of spending based upon the FY09 base.

Data includes SEAS & FAS

Ignores capital improvements

CHANGE IN LONG-TERM DEBT, DEBT SERVICE: FY'09-FY'20





- Long-term debt has fluctuated from $0.8B to $1.2B since FY09.
- Recent growth has been fueled by continuing investments in House Renewal

- Reflecting the financing for House Renewal, the annual debt service and related debt service ratio have also grown in recent years.
- Current debt agreements will be paid off within 20 years ($126M P&I/yr).

Data includes SEAS & FAS

FAS LEASES

	# of Leases	Rentable Square Footage	Annual Rent Expense
External Leases	16	201,090	$6.7M
Internal Leases	34	514,078	$19.9M
TOTAL	**50**	**715,168**	**$26.6M**

DIFFERENT RENT METHODOLOGIES CURRENTLY IN USE

	Cambridge Science Research Space	Housing in UG Contribution Formula	HRE Model
O&M	Actual annual O&M expenses by Building Root for buildings designated as Cambridge-Science Research Space (17 FAS and 5 SEAS bldgs) **total building**	Actual annual O&M expenses by Tub-Org for all College facilities tub-orgs, including swing space	Actual annual O&M expenses Including space recovery and operating maintenance expenses *(portion of operating renewal associated with routine maintenance, excludes larger operating renewal projects)* **total building**
Operating Renewal	0.7% of building CRV **total building**	Actual annual operating renewal expenses for all College facilities tub-orgs, including swing space	0.7% of building CRV **total building**
Capital Renewal: Debt Funded	Actual annual Principal + Interest **by capital project for core & shell projects only**	Actual annual Principal + Interest by Tub-Org For all college facilities tub-orgs, including swing space	Actual annual Principal + Interest
Funding Future Capital Renewal	Actual funding of future renewal ?	Actual funding of future renewal ?	1.8% of building CRV **total building**

"SHADOW PRICE" FOR SPACE: PRINCIPLES

- We propose to develop a **shadow price for space** to promote transparency, enable new kinds of incentives, and promote the efficient use of space.
- Rather than driving new opportunities for cost recovery, the primary anticipated use of the shadow price is to provide incentives and drive better decision making. Where rent is already charged, this shadow price can also provide for consistency
- In regard to the design of the shadow price, we suggest the following principles:
  - Generally, utilize groups of similar buildings to "smooth out" any idiosyncratic anomalies (e.g., science buildings vs non-science buildings)
  - Generally, use *more* smoothing when using shadow prices for cost recovery (in the interest of equity), and *less* smoothing when using shadow prices to drive incentives and promote better decision making
  - Price should depend on Operations & Maintenance cost and Current Replacement Value (cost of the functional replacement of a building, i.e., long-term capital renewal costs) and not on the way a building was financed
  - Adopt the actual rent paid by the FAS in place of shadow price for space that rented by the FAS

“SHADOW PRICE” FOR SPACE: METHODOLOGY

- Sort FAS portfolio by broad building category. Within each category:
  - Assign a weight to each building based on its size in net assignable square feet (NASF)
  - Apply this weighting to the total Operations and Maintenance (O&M) cost of the entire category to arrive at O&M/NASF for the category
  - Determine the target annual renewal spending (TARS) of the entire category by multiplying the total current replacement value (CRV) by the industry standard metric of 1.7%
  - Apply the weighting, above, to the TARS of the entire category to arrive at TARS/NASF for the category
  - Combine the weighted O&M and weighted TARS to get the implied annual cost/NASF of operating and renewing a representative building in the category

“SHADOW PRICE”: ILLUSTRATIVE RESULTS

- General/Assembly/Museum Buildings: $49.91/NASF
- Classroom Buildings: $50.67/NASF
- Offices/Administrative Buildings: $52.04/NASF
- Life Science Laboratory Buildings: $73.39/NASF
- Physical Science Laboratory Buildings: $88.11/NASF

“SHADOW PRICE”: ILLUSTRATIVE INCENTIVES

- As illustrations of the kinds of incentives that a shadow price can enable:
  - For a department: “for every 5,000 nsf you free up that can be usefully repurposed, we will provide your department with $80,000/yr for the next 5 years” (where the incentive payment depends on a formula that uses the shadow price and shares the upside to the FAS and the department)
  - For a PI: “we can either give you a lab of size 5,000 nsf, or we can give you a lab of size 3,000 nsf and an additional start-up of $80,000/yr for the next 10 years”
  - For a research group: “if your group moves from a footprint of 2,000 nsf to 1,000 nsf, we can give you $30,000/yr in unrestricted funding for the next 5 years”
  - For a staff member: “if you give up your office, in exchange for shared hoteling space, we will give you a bonus of $4,000/yr”
  - For a new center: “you should budget $200,000/yr for space”

RECOMMENDATIONS (IMMEDIATE)

- Conduct surveys to understand preferences in the post-pandemic workplace. Strive to understand the needs for all parts of the FAS community and remain sensitive to different needs
- Move quickly with urgency to develop multiple pilot experiments around flexible work, providing high-quality shared space in a reduced footprint while sustaining remote working where compatible with employee preferences
- Develop a “shadow price”--- a rate for office space and a rate for lab space that provides cost transparency and raises awareness and improves discipline around the cost of space ---and put this in place across the FAS. Benchmark the shadow price against external rent paid by the FAS
- Adopt a consistent approach to charge for space internally across the FAS; develop guidelines around indirect cost recovery for lab spaces and shared science infrastructure

RECOMMENDATIONS (MIDDLE TERM)

- Develop and experiment with incentive schemes, based on the shadow price, to motivate individuals and departments/units to reduce their space usage

RECOMMENDATIONS (LONGER TERM)

- Through flexible work, transparency, and incentive schemes, develop multi-year targets around improvements in space efficiency and pursue strategies to reduce space costs (e.g., sale/lease of buildings, termination of leases)
- For example, reduce the FAS space footprint by 5% by 2030, relative to what the space would be given the growth of the FAS over the same time period, saving ~$10M/yr in O&M or rent costs
- Operations and utility costs are presently $133M/year. Conduct a cost/benefit analysis into investments in green technology. Also look to promote behavior change and develop new standards
- Strive to find a better utilization of our space, for example, exploring new kinds of collaboration with the private sector/Harvard partners, and through summer rent collection

DIVISION OF CONTINUING EDUCATION

Subcommittee: David Parkes, Jay Herlihy, Glenda Carpio, Karen Thornber, Nancy Coleman, John Langridge

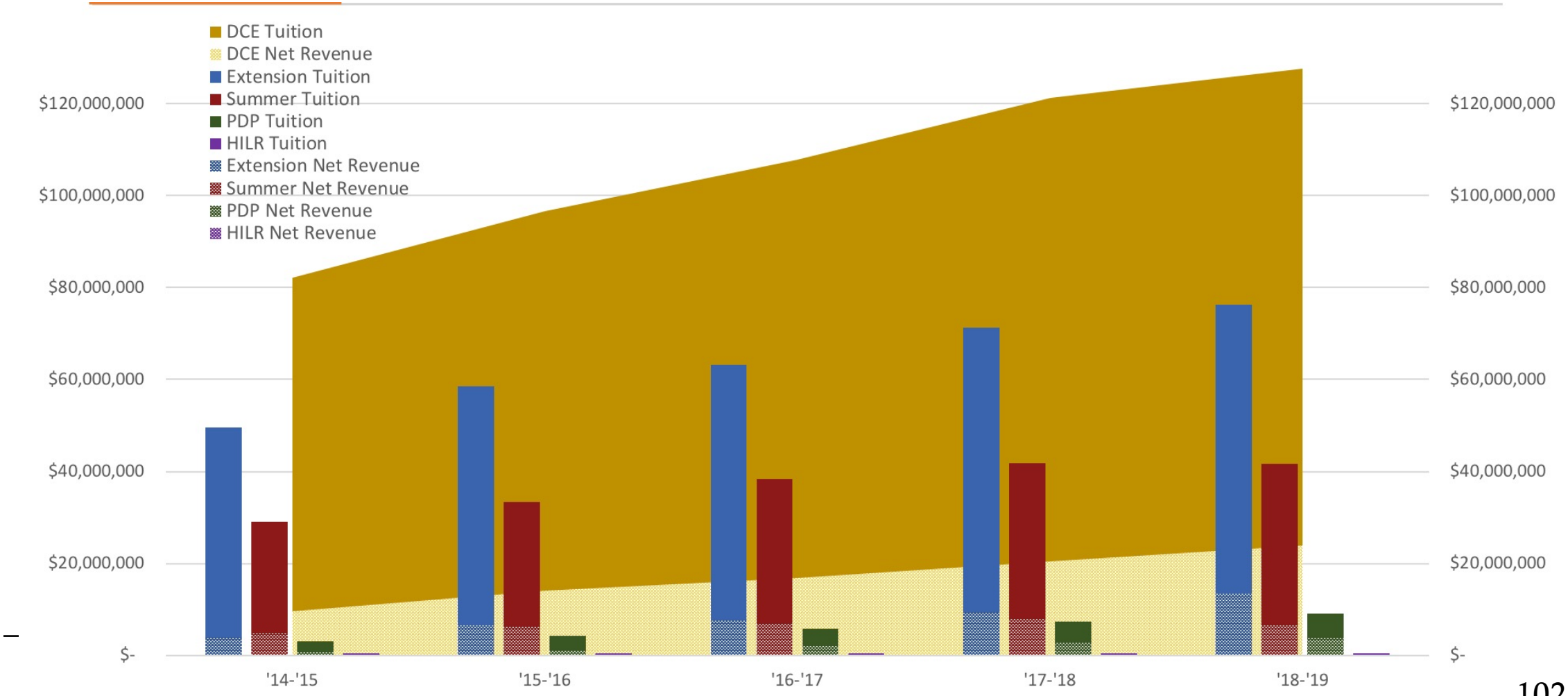
CHARGE QUESTIONS

- Where are the largest untapped opportunities to bolster the Division of Continuing Education's (DCE) programs, and generate revenue for the FAS?
- What constraints and challenges does the Division face, including governance challenges?
- How can the academic connection between the FAS and the Division be strengthened (e.g., faculty engagement, pedagogy, synergy with FAS strengths)?

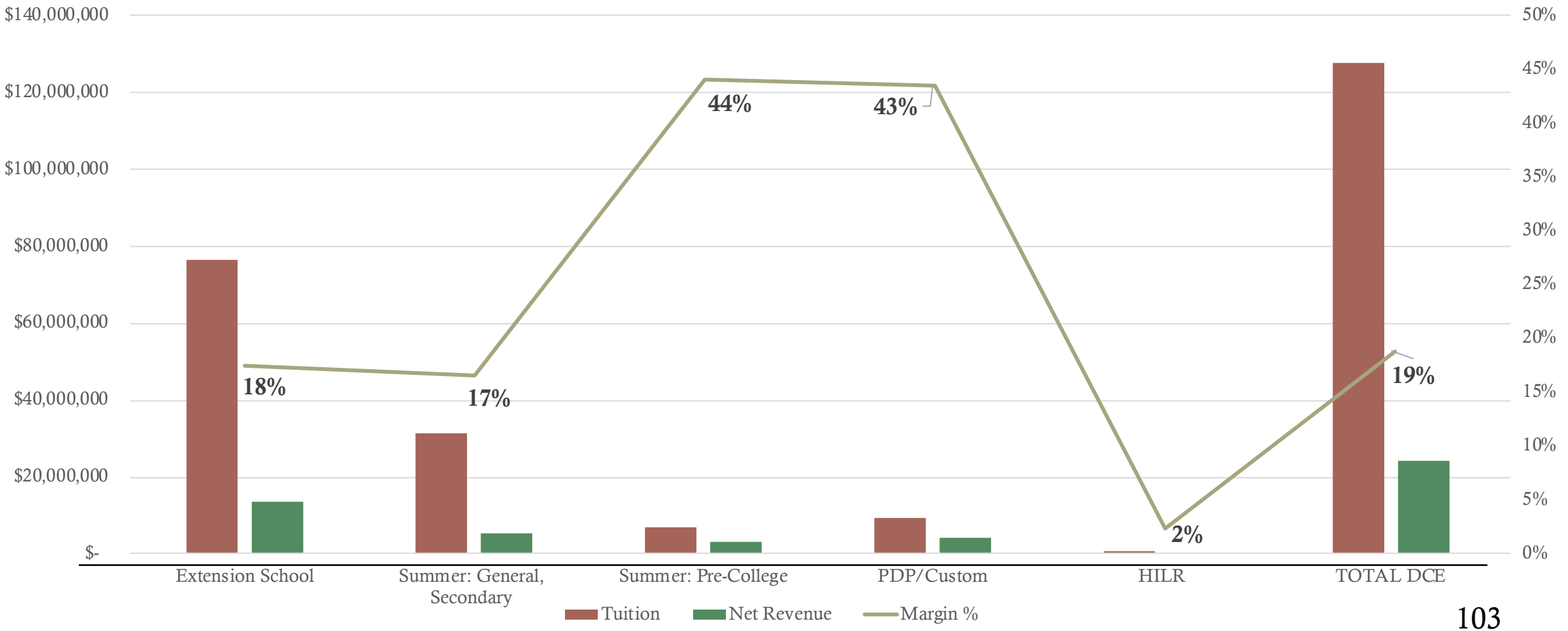
DATA/ANALYSIS

- 5 Year Financial Trends on:
  - Tuition by Program
  - Enrollments by Program
  - Net Revenue by Program
  - Profit Margin by Program
- Course Breakdown by Instructor
  - Harvard vs Non-Harvard faculty

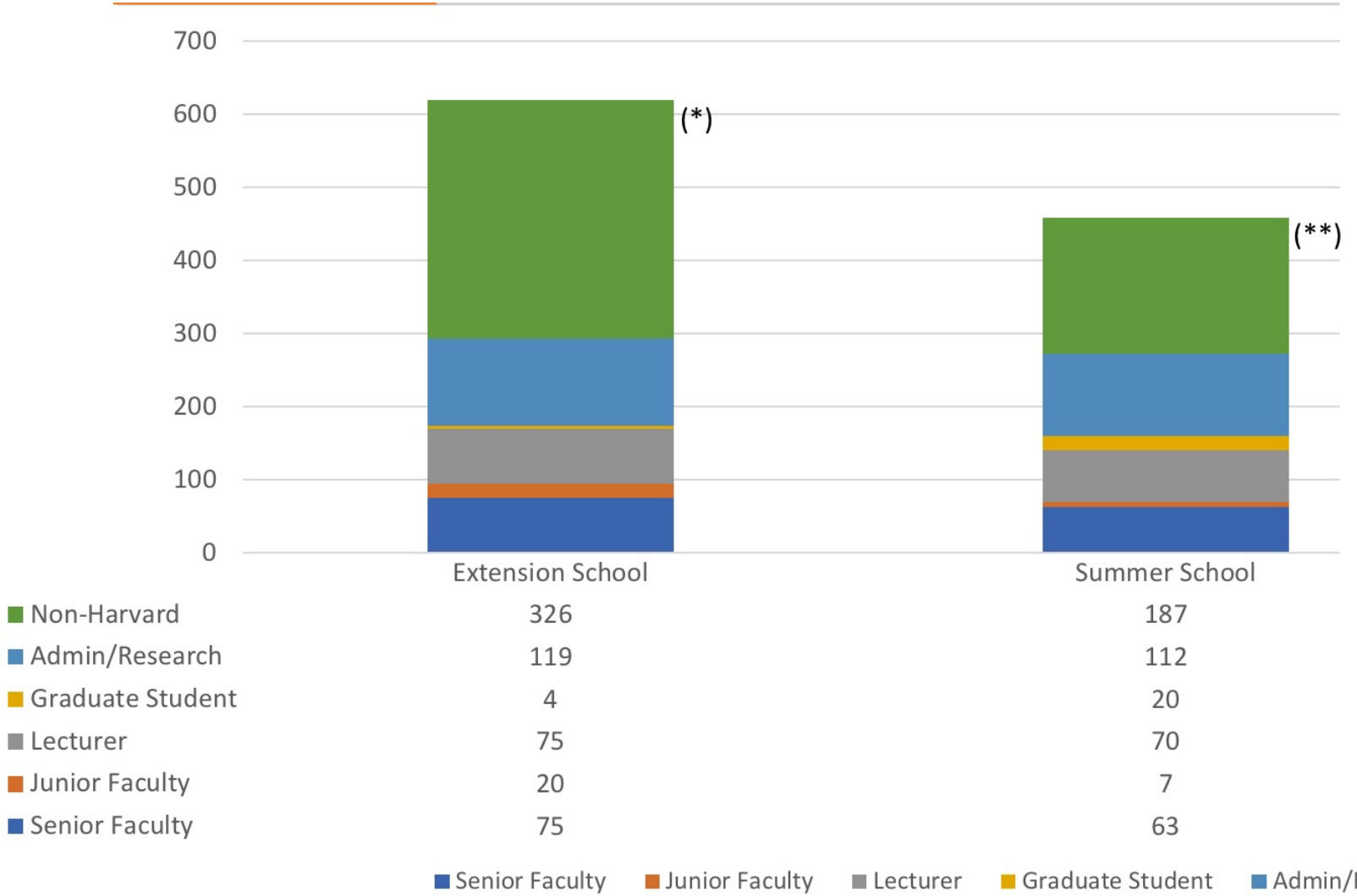
TUITION AND NET REVENUE (REVENUE NET COST)



DCE REVENUE: BREAKDOWN BY PROGRAM ('18-'19)



COURSE BREAKDOWN BY INSTRUCTOR ('18-'19)



(*) Management courses (~30% tuition) skew non-Harvard, while Social Sciences and Humanities (~20%) tuitiion skew to Harvard instructors

(**) Including Extension School summer courses, which comprises the non-Harvard instruction

OBSERVATIONS/PRINCIPLES

Opportunities

- International (extension, professional and summer)
- Prof Development (F2F/online, non-credit)
- Summer Visiting Students (UG/G)
- Certificates & Packaging (e.g. summer & PDP)
- Bring liberal arts strength to DCE degrees

Challenges

- Engagement with FAS Faculty & FAS Mission
- Degree Names (Bachelor of Liberal Arts, Ext Studies)
- School Name is outdated
- Residency requirement poses financial and logistical barriers
- Space constraints for summer programming

RECOMMENDATIONS (IMMEDIATE)

- Understand the revenue opportunities from expanding the DCE's programs (currently ~$20m annual subvention to FAS), where (1) low reputational risk, and (2) without creating undesired expectations on faculty. Candidates include
  - Extension School: certificates (professional schools), bundling (summer + PDP, certificate + PDP), single course-takers, Masters degrees
  - Professional Development Programs (online, F2F; big opportunity)
  - International (extension, professional; big opportunity)
  - Summer visiting programs / Summer online programs (professional schools)

RECOMMENDATIONS (MIDDLE TERM)

- Strengthen connections with FAS faculty
  - Bring FAS liberal arts strength into DCE degrees, even those professionally focused
  - Re-think the model for FAS faculty involvement in Extension school degree programs, for example a compensated position of faculty lead for each program
  - Boost faculty involvement in professional programs, through teaching-as-20% time models and suitable compensation
  - Further develop the role of FAS faculty in the oversight of programs and hiring, as appropriate
- Rethink the residency requirement for Extension school degrees
  - An optional, high-touch, on-campus weekend with immersive education and networking opportunities
  - Global “residency” options that meet students where they are

RECOMMENDATIONS (LONGER TERM)

- Rethink degree names, school name, and the residency requirement for HES degrees
- Relieve space constraints for summer programming

APPENDICES

1. A rubric categorizing the Centers hosted in the FAS.
2. A message from the FAS Academic Planning Group to faculty regarding GSAS admissions.

Name	Research Center	Core Facility	University-wide/IFI	Museum	Library	Research Grant	FAS UU Funded	Div/SEAS	NOTES
• African Studies, Center for	X		X					DOSS	**ADDED** - BSB12
• American History, The Charles Warren Center for Studies in	X							DOSS	
• Applied Computational Science, Institute for (IACS)								SEAS	TB1
• Asia Center	X		X					DOSS	BSB1
• Astrophysics, Harvard-Smithsonian Center for • Harvard College Observatory	X							DOS	HCO is FAS piece.
• BASF Advanced Research Initiative at Harvard University								SEAS	TB2
• Bionano Science and Technology, Kavli Institute for	X							SEAS/DOS	
• Brain Science, Center for	X						X	DOS	
• Chinese Studies, Fairbank Center for	X							DOSS	BSB2
• Computation and Society Center for Research on	X							SEAS	
• Dumbarton Oaks	X			X	X			AH	MvE2
• Edmond J. Safra Center for Ethics	X		X					DOSS	BSB3
• Environment, University Center for the	X		X					DOS	
• European Studies, Minda de Gunzburg Center for	X							DOSS	

• Harvard China Fund	X		X					DOSS	BSB4
• Harvard-China Project on Energy, Economy and Environment (China Project)	X							SEAS	
• Harvard Forest	X			X				DOS	
• Harvard Privacy Tools Project									
• Harvard Quantum Initiative	X		X				X	DOS/SEAS	
• Harvard Stem Cell Institute	X		X				X	DOS/HMS/ HOSPITALS	
• Harvard-Yenching Institute	X				X			AH	MvE3
• Hellenic Studies, Center for	X			X				AH	MvE4
• Hutchins Center for African & African American Research	X			X			X	DOSS	BSB5
• Integrated Quantum Materials, Center for (CIQM)	X					X		DOS/SEAS	
• International Affairs, Weatherhead Center for	X							DOSS	BSB6
• Japanese Studies, Reischauer Institute of	X							DOSS	BSB7
• Jewish Studies, Center fo	X							AH	
• Korea Institute	X							DOSS	
• Lakshmi Mittal and Family South Asia Institute	X		X					DOSS	BSB8

• Latin American Studies, David Rockefeller Center for	X		X					DOSS	BSB9
• Mahindra Humanities Center	X		X					AH	
• Materials Research Science and Engineering Center	X					X		DOS/SEAS	
• Microbial Sciences Initiative	X		X				X	DOS/HMS	
• Middle Eastern Studies, Center for	X							DOSS	BSB10
• Nanoscale Science and Engineering Center	X					X		DOS/SEAS	
• Nanoscale Systems, Center for	X	X					X	DOS/SEAS	
• Origins of Life Initiative	X		X					DOS/HMS/ HOSPITALS	
• Particle Physics and Cosmology, Laboratory for	X					X		DOS/ PHYSICS	
• Quantitative Social Science, Institute for	X	X	X				X	DOSS	BSB11
• Rowland Institute	X							DOS	
• Russian and Eurasian Studies, Davis Center for	X							DOSS	
• Society of Fellows	X							AH	MvE5
• Theory and Computation Institute for	X							DOS	Sits in CFA/HCO
• Ukrainian Research Institute	X							AH	

Definitions:

Research Center – Led by a senior faculty member, a research center contributes to the teaching, research, and/or training missions of the FAS by creating academic community around a research topic, attracting the intellectual and professional participation of a critical mass of faculty members, and involving students in the center's work and activities in significant and systematic ways. Research centers are often, though not always, interdepartmental or interfaculty in character, providing opportunities for new interrelationships within the FAS, the University, or broader intellectual communities.

Core Facility – A central investment in people and technology that provides services to a broad research community, including research programs across departments and Harvard Schools, and often extending to clients beyond Harvard.

University-wide/IFI – While formally hosted in FAS, these inter-faculty Initiatives have a formal relationship to the Office of the Provost and engage faculty across multiple Harvard Schools.

Research Grant – A center or institute fully funded by an external grant, often a federal sponsored research grant.

Div/SEAS – The Academic Division or SEAS with which the unit is formally affiliated and which provides academic and administrative oversight.

N.B. This list does not include single PI units, subsidiary centers within larger centers, or academic initiatives that do not have dedicated space and/or staffing.

NOTES:

BSB1 – Includes the Southeast Asia Initiative and any reporting on the Asia Center should include this sub-initiative.

BSB2 – Shares an Executive Director and some other admin activities, etc., with the Harvard China Fund.

BSB3 – Heavily grant funded; include sponsored research funding when running reports to capture full size and scope.

BSB4 – Includes an overseas, satellite office in Shanghai.

BSB5 – Also contains the Cooper Gallery, a museum collection (NOT part of HMSC).

BSB6 – Contains a number of sub organizations and mini-centers (US Program on US Japan Relations, Harvard Academy, and many others that are less formally recognized as discrete centers). All should be included in any reporting on the WCFIA.

BSB7 – Contains professorships. These should be included in review of Center finances.

BSB8 – Contains office in Dehli.

BSB9 – Contains offices in Mexico City, Santiago, Buenos Aires, Sao Paulo.

BSB10 – Contains office in Tunis.

BSB11 –Should include HMDC in any reporting on the Center since funds co-mingle to support the mission. IQSS also contains CGA, which is wholly funded by the Provost's Office. FAS and OPP both provide substantial UU support to enable operations, but this is not the Center's sole source of funding.

BSB12 –Contains office in Johannesburg, SA.

MvE2 – DO is its own tub and located in Washington, DC. It is fully self-supporting. It contributes to the FAS bottom line through an annual transfer.
MvE3 - HYI is a different entity from the others on this list. It is fully supported through internal funding sources (invested by the HMC), and has its own governance structure, although the Director is always a Harvard faculty member
MvE4 – CHS is also located in Washington, DC. Its budget includes an office abroad in Nafplio, Greece
MvE5- SoF is a recent addition to the A+H Division. It has not traditionally been part of the portfolio of centers in the academic divisions.
TB1 -- IACS is a teaching center.

October 29, 2020 via email

Dear FAS Colleagues,

As you know, many of our peer institutions have announced pauses on graduate student admissions for fall 2021, citing the ongoing consequences of the COVID-19 pandemic and the importance of supporting their continuing students. In recent months, GSAS, SEAS, and FAS leadership have heard from many faculty members who are deeply concerned that Harvard's research mission and the intellectual life of individual departments would be compromised if a similar decision was announced for GSAS graduate programs. After careful consideration, we have resolved to take a more balanced approach to admissions than some of our peers, one that aims to preserve our research and intellectual goals as much as possible, while keeping our focus on the many ways we can all continue to support our current students.

Early on, it was clear that this would be a tough admissions season. In addition to our concerns about current students and Harvard's academic mission, we cannot ignore the toll that the pandemic and its financial ramifications have taken on the University. As a result, this year's admissions targets will be conservative and will take into account the likelihood that continuing students will need additional advising and that, in some fields, their progress will be hampered by reduced access to materials, resources, and spaces. In numerous fields, too—particularly those heavily dependent on the academic job market—employment outcomes that were already challenging before the COVID-19 crisis are now severely affected. We consider it our ethical responsibility not to exacerbate these problems by taking a full cohort of new students: In a few cases, cohorts will be heavily reduced or even paused.

GSAS continues to identify and address ways to help you and your students. Approximately $4 million was reserved to support students through the Emergency Support Initiative (ESI), which has provided students with funding for lost time as well as tuition and fee grants for students outside the financial support package. The ESI also created visiting fellowship opportunities that allow new alumni to remain affiliated with Harvard. Working with the Office of Undergraduate Education, the School identified students who required teaching for the fall term and ensured that they received teaching appointments or equivalent positions. GSAS has also worked with many of you—and will continue to provide advice and support—as you address the issues that prevent students from progressing with their research, which includes guiding them as they re-envision their projects. We are grateful to you for helping your students to maintain forward momentum, so crucial to Harvard's reputation for academic excellence.

A Forward-Looking Approach

Even as we determine how best to support our students, the current crisis has exacerbated several existing and fundamental concerns about PhD curricula, the well-being of students, and their employment outcomes. These issues are not specific to Harvard but pertain to graduate education as a whole. As a leader in higher education, Harvard has a responsibility to do better for our students and faculty, for our programs, and, through the impact our graduates have, for the world. Rather than table these concerns for the future, we believe that now is the time to turn a crisis into an opportunity, to step back and address graduate admissions in the spirit of a reset that will ensure that the reputation and student experience of our research degrees go from strength to strength in the 21st century.

Graduate admissions targets have often been grounded in the belief that more is better: that increasing cohort size is the goal. This has created a less than optimal environment for some of our students,

increasing time to degree, decreasing advising effectiveness, and narrowing the evaluation of prospective students' excellence and potential.

Addressing these shortfalls and determining solutions will, by necessity, take time and strong partnership between GSAS, SEAS, the FAS divisional deans, and all of you. Over the course of the next year, GSAS will work with programs to further encourage best practices in admissions that will help faculty recruit the most promising students and ensure that each student will be supported in reaching their full potential in the areas of **advising**, **diversity**, and **outcomes**. In addition, we will begin an extended conversation about what a PhD should be in the 21st century and how curricula, training, and professional development should reflect these goals.

Strength of Advising

In choosing Harvard, GSAS students rightly expect academic excellence. This excellence is seen in the high quality of our teaching, research, and academic advising. As you know, advising the talented graduate students we admit and setting them up for success is a privilege. Our goal as advisors is to provide them with the guidance they need to successfully navigate their academic training, graduate in a timely manner, and enter the profession of their choosing with confidence and support.

Admissions targets in the longer term will be determined in part by program advising quality: Do advisors provide timely guidance and feedback on proposals and other materials? Are all faculty in a program successfully advising students or are a small number of faculty managing the bulk of the advisees? Are expectations of advisors and advisees clearly articulated, and does the program take a structured approach to advising? Does the program include an effective mentoring committee system that augments the student-advisor relationship with additional faculty? Do the students in the program consider themselves as well supported?

Diversity

Excellence manifests itself in diverse ways, and we must think more expansively when we consider whom to admit: An over-credentialed candidate may not hold the same potential as an applicant with fewer accomplishments but who shows outstanding promise. Cohorts should reflect multiple, broad perspectives that augment the learning happening in the classroom or lab. In rankings, more emphasis should be placed on this potential than is currently the practice.

How departments build diverse cohorts and make their ranking decisions will also factor into admissions targets. Are departments looking broadly for students or are they choosing applicants based on familiar faculty recommenders? Are students coming from a limited number of feeder institutions? Have programs addressed their assumptions about what constitutes the ideal candidate? Have programs engaged in active outreach to broaden their applicant pool?

Outcomes

Students come to Harvard to develop and finalize their ideas, graduate, and successfully find a job in the profession of their choosing. In some fields, this process runs smoothly. In others, students may find few opportunities to pursue their career goals. GSAS has collected employment data for new graduates and graduates 10 years out to track these career outcomes and inform the decisions made by the admissions committee.

In determining admissions targets, programs will be reviewed for several criteria: How well does the curriculum prepare students for a successful outcome in the context of the particular discipline? What is

the average time to degree? How have past graduates fared in the job market? How does the job market currently look?

Preserving Harvard's Excellence

As stated above, this is an opportunity to reset our graduate admissions process, evaluate how we are serving our graduate students, and ensure that we are setting them up for success as students and as alumni, regardless of program or stage in program. By taking these steps, we will work together to preserve Harvard's excellence and continue fostering the intellectual talent that drives it.

With all best wishes,

Claudine Gay
Edgerley Family Dean of the Faculty of Arts and Sciences
Wilbur A. Cowett Professor of Government and of African and African American Studies

Emma Dench
Dean of the Graduate School of Arts and Sciences
McLean Professor of Ancient and Modern History and of the Classics

Lawrence Bobo
Dean of Social Science
W. E. B. Du Bois Professor of the Social Sciences

Francis J. Doyle III
John A. Paulson Dean of the Harvard John A. Paulson School of Engineering and Applied Sciences
John A. and Elizabeth S. Armstrong Professor of Engineering and Applied Sciences

Robin Kelsey
Dean of Arts and Humanities
Shirley Carter Burden Professor of Photography

Christopher Stubbs
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