

THE DEAN'S ANNUAL REPORT 2015

Dear Colleagues,

It is my pleasure to present the *Dean's Annual Report* on the activities of the Faculty of Arts and Sciences (FAS) during Academic Year 2015 (July 2014 through June 2015).

Annual reporting isn't what it used to be. In our constantly connected world, the cycles of information have become much shorter. We all walk around with a 24-hour newsroom in our pockets and can access, anytime and anywhere, information about the many activities of our individual faculty and students. Those stories are important, and together they illustrate the vibrant and dynamic institution that is Harvard. But, our celebrations of those achievements shouldn't be on hold for once-a-year applause. We can and should share their stories as they happen, and increasingly we do.

We read about our faculty's accomplishments in the daily Gazette. We follow College happenings through Dean Rakesh Khurana's posts on Instagram. The unbounded activities of our graduate students are tweeted in 140 characters. The success stories of our Extension School students appear regularly on Inside Extension on the School's website, and we can relive the interdisciplinary discussions of the Mahindra Humanities Center on YouTube. These are just a few of the many digital channels of our FAS schools, divisions, departments, centers, institutes, and initiatives.



With all this in mind, I have slimmed down the annual report and focused it on the kind of insights that can only come from looking cumulatively at action over time. The analysis presented herein on our faculty trends and financial performance provides us with a view of the impact of our collective efforts to support the activities of a dynamic, engaged, and productive faculty. Additionally, this year I include a brochure prepared for our alumni that summarizes our progress in the Harvard Campaign for Arts and Sciences, now reaching its midpoint.

In addition to these important data, I will strive each year to highlight a unit of the FAS for special distinction.

This year that unit is the library, which is celebrating the 100th anniversary of the opening of Widener. In particular, I've included a conversation with Sarah E. Thomas, Vice President for the Harvard Library and Roy E. Larsen Librarian for the Faculty of Arts and Sciences, on the future of libraries.

There is much to be proud of in this report. Although we operated in an environment of considerable constraint and ended the fiscal year with a small deficit, our collective efforts this past year resulted in noticeably better-thanbudgeted results. And, our stewardship over the past year doesn't end there, as we have also attended to the responsible long-term maintenance of several core information systems (e.g., the new Student Information System) and important physical assets (e.g., House Renewal). While our efforts toward achieving fiscal balance are not yet over, these are nontrivial accomplishments after seven years of demanding budgetary constraints.

It is clear that the future steadily brightens with each passing year of the Harvard Campaign for Arts and Sciences. Its success in engaging our alumni and donors in the priorities of our teaching and research mission means that we are able to sustain the crucial work of recruiting, supporting,

and retaining the best faculty and students. While the media makes much of the size of our endowment and the fundraising success of our campaign, we know that it is what we do with these funds that matters. I continue to be proud of the wide-ranging intellectual and pedagogical activities of our extraordinary faculty and staff and grateful to the alumni and donors who extend them through their support.

The report on faculty trends contains both good and troubling news. I was encouraged to see over the past year continued progress in diversifying the faculty. While we haven't reached our aspirations for faculty diversity, I believe that we have achieved an important milestone: We have now demonstrated that we are able to diversify the faculty without having to concurrently grow it. We reached this milestone because of your collective efforts.

Unfortunately, all is not good news in the report on faculty trends. The report details a persistently high rate of tenure-track women faculty leaving Harvard before we have even had a chance to review them for promotion to tenure. The report analyzes some clearly identified causes and outlines steps we will take this year to change our culture. As the report states, investing significant resources and faculty time in recruiting outstanding young faculty is a wasted effort if we cannot retain these faculty by providing them with an inviting and supportive environment for building their careers.

Overall, I remain optimistic about our future. Throughout the past year, I have seen faculty, students, and staff lean into shared challenges, local ones here on campus and daunting problems facing our world, and do it with integrity, compassion, and intellectual bravery. Time and again,

I've seen our community do, not the easy thing, but the right thing. Together we can make the positive change we want to see at Harvard, and in so doing lead the world toward a better future. It is an honor, and indeed a privilege, to serve the FAS, and I look forward to the year to come.

Sincerely yours,

Michael D. Smith
Edgerley Family Dean of the Faculty
of Arts and Sciences
John H. Finley, Jr. Professor of Engineering
and Applied Sciences





THE NEXT 100 YEARS AT WIDENER:

A CONVERSATION WITH SARAH THOMAS







LEFT: Examining books and manuscripts during a Harvard Wintersession class TOP RIGHT: Mary Kocol, Imaging Technician, photographs rare maps in the digital lab BOTTOM RIGHT: The Rita E. and Gustave M. Hauser Digital Teaching & Learning Studio

At the turn of the 20th century, books were piling up on the floor of Gore Hall, then the main library for Harvard College, or being moved by the tens of thousands to storage. The opening of the Harry Elkins Widener Memorial Library, larger than any other Harvard building at the time, would offer relief on a grand scale.

As we mark the 100th anniversary of the iconic and beloved Widener Library, Sarah Thomas, Vice President for the Harvard Library and Roy E. Larsen Librarian for the Faculty of Arts and Sciences (FAS), looks to the next century at a time when the role of libraries, and librarians, in research universities is fundamentally changing.

In a whole host of ways, the context for scholarship has changed radically over the past 100 years. What has this meant for university libraries?

"In the 21st century, the amount of knowledge being produced every decade far exceeds the ability to access that knowledge in one structure," Thomas says, noting that the Harvard Depository now holds 10 million volumes, four times the number at Widener.

The challenge, she says, is "how to get information to people at the point of thought, at the point of need... to have in the 21st century the same delight at learning and discovery that we cherish from the 20th century."

"We need to redefine access to knowledge," says Thomas, integrating digital and analog sources, so that the "pleasure of standing in a vast repository and enjoying the serendipity of discovery" can extend across the holdings of any one library or university.

How is Harvard Library meeting those challenges?

We focus our work on four core priorities:

- Innovating and expanding services to most easily and productively connect users with the information they need. That means expanding collections, securing access to electronic journals, and building the technological and physical infrastructure to help people find those resources.
- Opening international access to Harvard collections by developing online resources through initiatives such as the Colonial North American Project and digitizing more than 500,000 pages of rare and unique holdings from all of Harvard's schools.

- · Creating virtual and physical spaces for discovery and learning by combining traditional areas for quiet study with interactive and collaborative learning commons. This includes "one-button" recording studios, exhibition galleries, and classrooms for teaching with collections or offering instruction on information management.
- Investing in expert staff to pursue these goals and to work as partners, contributing copyright knowledge, technological skills, and domain and disciplinary expertise.

What are some examples of recent efforts in support of those priorities?

I would point to three categories of activities we've been working on over the last few years that give you a sense of the range of our efforts.

- Opening "hidden" collections by launching 19 separate projects focused on ensuring access to some of Harvard's hard-to-find treasures across a wide range of Library collections. This includes historic picture postcards of the Americas, the sounds and moving images of Greek shadow theater, the photographic collection from Aerial Photography, Inc., and the Polaroid consultant records. In Fiscal Year 2016 and Fiscal Year 2017, Arcadia funding is available for 22 new projects of this kind.
- Enabling the joint search of books and articles through an upgrade that makes HOLLIS+ the primary Harvard Library catalog. The upgrade also introduced support for special collections and archival material. Now, scholars can search and display digitized manuscripts, books, and images from the Library's special collections along with archival finding aids from Harvard University.
- Investing in online learning and assessment to support the development of a data-driven approach to achieving library objectives and meeting user needs. This includes developing and delivering innovative e-learning programs and services across Harvard's libraries, and designing and coordinating programs that focus on improving the user experience across the library system.

You mention building new expertise in the Harvard Library. What do you see as the role of the librarian in the FAS today?

"Librarians are becoming true partners in the academic enterprise," Thomas says. "We know how information is organized, and how to locate and manage it in a vast network. Librarians are really good at connecting the dots, not just in a twodimensional way, but multi-dimensional."

How does that partnership play out? What are the benefits for faculty and students?

"There are those who want to savor what they're studying... engage introspectively with a text and think deeply about it. At other times, they want to dip in, slice across it, and examine a text differently," she says. "FAS libraries should serve and encourage both, working to expand access to knowledge of all kinds across disciplines and institutions."

At Harvard's libraries, says Thomas, scholars and students will find someone who will "listen, analyze how they work, get them what they need—even when they don't yet know they need it—and do so in a way that makes it easy."

Close-up of a book from the Harry Elkins Widener Memorial Collection





FACULTY TRENDS

DEAN NINA ZIPSER
OFFICE FOR FACULTY AFFAIRS

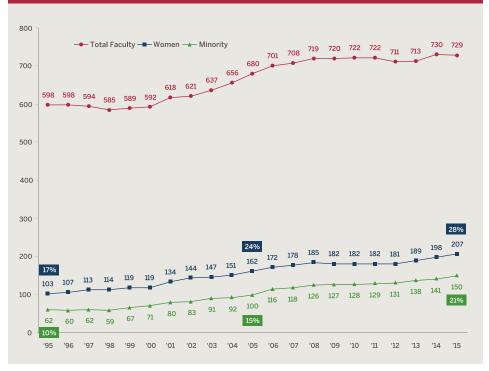
ACADEMIC YEAR 2014-2015

As of September 2015, the Faculty of Arts and Sciences (FAS) includes 729 ladder faculty, close to its all-time high last year of 730.¹ In Academic Year (AY) 2014–15, the FAS appointed 43 new ladder faculty, saw 44 ladder faculty depart, and promoted 16 tenure-track faculty to tenure.

The numbers of women and minority faculty continue to increase. Currently, the faculty is composed of 207 women (up from 198 last year) and 150 minorities (up from 141 last year). Women now represent 28%² of the faculty, and minorities represent 21%³ of the faculty.

The appointment of outstanding faculty continues to be one of the FAS's highest priorities. We can only achieve this goal by creating, and searching in, the broadest possible pools of candidates. This approach has led to significant progress in diversifying the faculty, even in years such as the last where we experienced no faculty growth.

FIGURE 1: LADDER-FACULTY COUNTS IN THE FAS, FALL 1995 TO FALL 2015



The ladder-faculty ranks include Convertible Instructor, Assistant Professor, Associate Professor, Professor in Residence, Professor, and University Professor. The minority category includes the following race and ethnicity designations: "Hispanic or Latino," "Black or African American," "Native Hawaiian or Other Pacific Islander," "Asian," "American Indian or Alaska Native," and "Two or More Races." Of the 729 current ladder faculty, 16 are ladder faculty from other Harvard Schools who have joint appointments in the FAS as voting members of the faculty.

RECRUITING WOMEN

Last year, 20 of 43 (i.e., 47% of) external ladder-faculty offers were made to women. Over the last three years, 70 of 148 (47% of) offers were made to women. The table to the right shows the last three years of external offers by gender.

TABLE 1: EXTERNAL LADDER-FACULTY OFFERS BY GENDER, AY 2012–13 TO AY 2014–15

	2012-13	2013-14	2014-15	Total
Offers to women	21 (45%)	29 (50%)	20 (47%)	70 (47%)
Offers to men	26 (55%)	29 (50%)	23 (53%)	78 (53%)
Total	47	58	43	148

The ladder-faculty ranks include Convertible Instructor, Assistant Professor, Associate Professor, Professor in Residence, Professor, and University Professor.

¹ The ladder-faculty ranks include Convertible Instructor, Assistant Professor, Associate Professor, Professor in Residence, Professor, and University Professor.

² Specifically, 26% of senior faculty (i.e., Professors in Residence, Professors, and University Professors) and 39% of tenure-track faculty (Convertible Instructors, Assistant Professors, and Associate Professors) are women.

³ Specifically, 19% of senior faculty and 26% of tenure-track faculty are minorities.

With regard to incoming faculty, 29 of 43 (44% of) new faculty appointees starting in Fall 2015 are women. Over the last three years, 52 of 122 (43% of) new faculty appointees were women. The table to the right shows the last three years of incoming ladder faculty by gender.

TABLE 2: NEW LADDER-FACULTY APPOINTEES BY GENDER, FALL 2013 TO FALL 2015					
	Fall 2013	Fall 2014	Fall 2015	Total	
New women appointees	14 (40%)	19 (43%)	19 (44%)	52 (43%)	
New men appointees	21 (60%)	25 (57%)	24 (56%)	70 (57%)	
Total	35	44	43	122	

The ladder-faculty ranks include Convertible Instructor, Assistant Professor, Associate Professor, Professor in Residence, Professor, and University Professor. New appointees include new hires as well as ladder faculty from other Harvard Schools who are new to the FAS as voting members of the faculty (two in Fall 2013, two in Fall 2014, and four in Fall 2015). New appointments in Table 2 do not necessarily correspond to the offers in Table 1, as some faculty deferred their appointment start date after accepting an offer.

RECRUITING MINORITIES

The FAS has also made progress in recruiting minority candidates. In the last three years, the FAS extended 41 external offers to minorities, representing 28% of all ladder-faculty offers. During the same period, the FAS appointed 37 new minority faculty, representing 30% of all new ladder-faculty appointments. Currently, minorities represent 21% of the faculty (up from 19% last year).

In the last three years, underrepresented minorities⁴ represented 9% of external offers and 14% of new appointments. Currently, underrepresented minorities represent 8% of the faculty (up from 7% last year).

Diversifying and strengthening our faculty is a shared responsibility and takes a collective effort. We would like to express our gratitude to all of our colleagues who continue to advance this important goal.

We are encouraged by all of these outcomes and will persist in our efforts to reinforce best practices during the faculty search process. Mahzarin R. Banaji, Richard Clarke Cabot Professor of Social Ethics, who has been the Senior Adviser to the Dean on Faculty Development since AY 2010–11, has played a vital role in this area. Professor Banaji has been working with our divisional offices, the department chairs, and search committee

members in a true team effort. We continue to update and distribute "Recommendations for Ensuring the Integrity of Faculty Searches," authored with Professor Banaji, which draws on behavioral science research and departmental feedback in suggesting ways to minimize bias when conducting a search. "Recommendations" is sent to department chairs with every search authorization, and all search committee members are asked to use it as a guide.

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⁴ The underrepresented minority category includes the following race and ethnicity designations: "Hispanic or Latino," "Black or African American," "Native Hawaiian or Other Pacific Islander," and "American Indian or Alaska Native."

⁵ The latest version of this document can be found on the Office for Faculty Affairs website: http://isites.harvard.edu/icb/icb.do?keyword=k15149&pageid=icb.page376921.

TABLE 3: ASSISTANT-TO-ASSOCIATE PROFESSOR PROMOTION RATES					
	% Who stood for review to Associate Professor		Associate review success rate (conditional on standing for review)		Associate promotion rate
Women	84%	Χ	97%	=	81%
Men	88%	Х	97%	=	85%
Total	87%	Х	97%		84%

Rates were calculated from outcomes for the 216 Assistant Professors hired between Fall 2003 and Spring 2011. One pending outcome was not included in the cohort.

TABLE 4: ASSOCIATE-TO-TENURED PROFESSOR PROMOTION RATES					
	% Who stood for review to Tenured Professor		Tenure review success rate (conditional on standing for review)		Tenure promotion rate
Women	66%	Х	67%	=	44%
Men	78%	Х	68%	=	53%

Rates were calculated from outcomes for the 222 Associate Professors who started their appointment between Fall 2003 and Spring 2012. Seven Associate Professors who started their appointment beyond Spring 2012 were included in the cohort, because they were hired on to the tenure track under a now obsolete review schedule in which the standard Associate Professor appointment lasted three years rather than the current standard of four years. In addition, three Associate Professors whose reviews are still pending were not included in the cohort.

RETIREMENT

In addition to an increasingly diverse pipeline, the FAS Faculty Retirement Program has contributed to faculty diversity. Last year, 15 of 17 faculty who retired were men. Of the 90 faculty who have signed a retirement agreement since the program launched in 2010, 77 are men (86%), and 13 are women (14%). In addition, only three of the 90 faculty are minorities.

PROMOTION

The FAS is deeply committed to a tenure-track system in which qualified faculty members are reviewed for promotion at regular intervals and according to clearly stated criteria. Promotion rates remain strong. Last year, 16 of 18 faculty who stood for their tenure review were successfully promoted, including five of six women (83%) and 11 of 12 men (92%). Below, we provide more detailed promotion statistics.

Promotions to Associate Professor

Of the cohort of 216 Assistant Professors hired between Fall 2003 and Spring 2011,7 84% were promoted to Associate Professor, including 85% of the men and 81% of the women. A Chi-square test for independence shows no statistical difference (p=0.40) between the two groups. Not all Assistant Professors in the cohort stood for promotion, as discussed below.

Among Assistant Professors who stood for their promotion review to Associate Professor, the success rate was 97% for both men and women. However, a lower percentage of women (84%) stood for their review compared to men (88%); a Chi-square test for independence shows no statistical difference (p=0.35) between the two groups.

Promotions to Tenure

Of the cohort of 222 Associate Professors starting their appointment between Fall 2003 and Spring 2012, \$50% were promoted to tenure, including 53% of the men and 44% of the women. A Chi-square test for independence shows no statistical difference (p=0.21) between the two groups.

Among faculty who stood for their tenure review, the success rate was 67% for women and 68% for men. However, a lower percentage of women (66%) stood for their review to Tenured Professor compared to men (78%), which is a troubling difference that approaches statistical significance via a Chi-square test for independence (p=0.06).

⁶ The details of the FAS Faculty Retirement Program can be found on the Office for Faculty Affairs website: http://isites.harvard.edu/icb/icb.do?keyword=k15149&pageid=icb.page397650.

⁷ This is the largest cohort available to the FAS Office for Faculty Affairs. Our comprehensive data on associate promotions extends back to Assistant Professors hired in Fall 2003. We cannot extend beyond those hired in Spring 2011, because a sizable fraction have not yet completed their review.

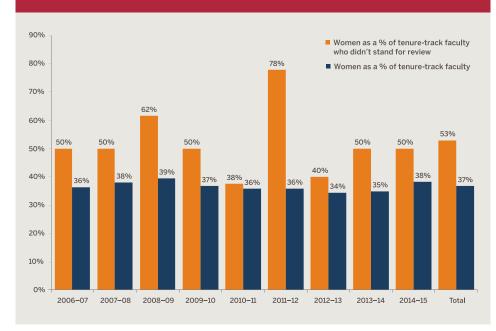
⁸ This is the largest cohort available to the FAS Office for Faculty Affairs. Our comprehensive data on tenure promotions extends back to Associate Professors starting in Fall 2003. We cannot extend beyond those starting in Spring 2012, because a sizable fraction have not yet completed their review.

As seen in Tables 3 and 4 on the previous page, the gendered difference in the cohort promotion rates is due to a smaller percentage of women deciding to stand for review (the majority of these women left before their scheduled review year), as compared to men.

After reporting on this trend in last year's annual report, we analyzed the historical trends and found that the trend of higher attrition rates for women has been persistent over the last nine years.9 Since 2007, 53% (45 of 85) of faculty who left the tenure track without standing for their tenure review were women. This finding is striking, considering that women made up 37% of the tenure track, on average, during that period.

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FIGURE 2: ASSISTANT AND ASSOCIATE PROFESSORS WHO DEPARTED THE TENURE TRACK WITHOUT STANDING FOR THEIR ASSOCIATE OR TENURE REVIEW



A disproportionate number of tenure-track women have not stood for their promotion reviews since 2007.

THE EXPERIENCE OF TENURE-TRACK FACULTY

Beyond the attrition data, we also studied the results of the University-wide 2013 Faculty Climate Survey (conducted by the Office of the Senior Vice Provost for Faculty Development and Diversity) and talked with women faculty who are leaving Harvard. The FAS data from the 2013 Faculty Climate Survey showed that tenure-track women in the FAS reported lower levels of overall satisfaction with being a faculty member at Harvard than the tenure-track women in any of the other Harvard Schools. The tenure-track

women in the FAS were more likely than tenure-track men to report work stress in such areas as time to do research, scholarly productivity, securing funding, managing research groups, teaching load, and administrative duties. This finding was coupled with tenure-track women reporting higher levels of stress in trying to balance their personal and professional lives. For all tenure-track faculty, the responses to questions regarding mentoring showed that majorities of both female *and* male tenure-track faculty are not satisfied with the advice they receive, on multiple dimensions.

In conversations with tenure-track women who were leaving Harvard, we found many reasons for their decisions to depart. The most striking reason provided, however, was departmental culture. In many cases, these faculty members found that the culture of the department was not conducive to their productivity and was a significant factor in their decision to leave.

It is critical that we address the experience of all tenure-track faculty, and that we are especially attentive to the experience of women. Investing vast resources and faculty time, as we do, in recruiting outstanding faculty is a wasted effort if we cannot retain these faculty and show them that Harvard is an outstanding place to build their careers.

To address these findings and improve the experience of our tenure-track faculty, the FAS Dean is launching several initiatives this year.

First, during this fall's academic planning meetings, the academic deans will review with departments the mentoring plans that each department established for its tenure-track faculty in AY 2010–11. This

review will enable us to gather and share best practices and also to assess where we are failing. The academic deans will also talk with departments about what, beyond mentoring, they do to support their faculty, and what, if anything, can be done to strengthen their departmental culture.

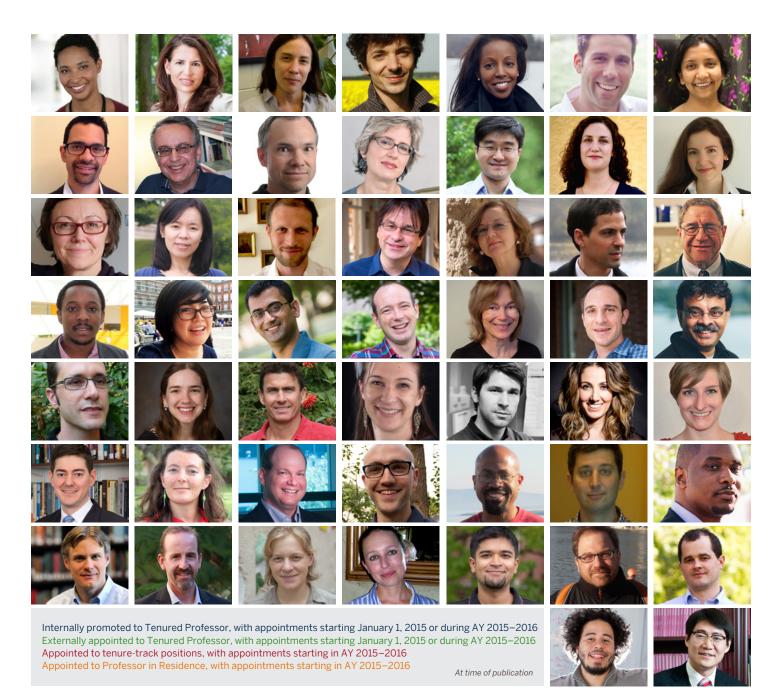
Second, the Office for Faculty Affairs is creating a series of leadership workshops for tenure-track faculty. Leadership is a key aspect of professional development, for men and women alike. The first workshop, held in September, was led by Frances X. Frei, Harvard Business School's UPS Foundation Professor of Service Management and Senior Associate Dean for Faculty Planning and Recruiting. Professor Frei is a distinguished scholar in organizational management, with a particular understanding of the issues facing emerging leaders. Her workshop foregrounded the principles and strategies for effective leadership in academia.

Third, the Standing Committee on Women (SCW), under the leadership of Mary C. Brinton, Reischauer Institute Professor of Sociology, will expand its highly successful series of mini-symposia beyond the Science Division to include tenure-track women in the Arts and Humanities and Social Sciences. Mini-symposia for tenure-track women in the sciences

were originally developed by Elena M. Kramer, Bussey Professor of Organismic and Evolutionary Biology and previous chair of the SCW. In addition to its symposia, the SCW will discuss the "nudges" that faculty and administrative leadership can use in departments to create a more productive work environment for tenure-track colleagues.

Finally, the FAS will work to develop more day-care options available to the FAS community. As we move forward with this project, we will consult with the community to ensure that the options we consider meet people's needs.

These efforts will help us to sustain an environment in which all of our faculty members can thrive and build careers. Contributing actively and positively to this environment is an important, shared responsibility. We hope that all faculty will reflect deeply on these issues and join with the leadership of the FAS to improve mentoring and change departmental cultures to better support our tenure-track faculty.



Danielle Allen Sunil Amrith Paola Arlotta Demba Ba Boaz Barak Eric Beerbohm A. Selim Berker Melani Cammett Sidney Chalhoub Yiling Chen Genevieve Clutario Kathryn Davidson Marine Denolle Francis J. Doyle III Cora Dvorkin Sean Eddy Sam Gershman Arunabh Ghosh Joseph Henrich Matthew Hersch Jennifer Hoffman Pierre Jacob Jane Kamensky Frank Keutsch Eddie Kohler Talia Konkle Scott Kuindersma Justine Landau Sarah Lewis Xin Li Françoise Lionnet Elizabeth Lunbeck Alexander Meissner James Mickens Gautam Rao John Rinn
Alexandra Rosati
Jacob Rosen
Sasha Rush
Pardis Sabeti
Matthew Schwartz
Mariano Siskind
Maurice Smith

Mansi Srivastava Stefanie Stantcheva David Stern Madhu Sudan Natasha Sumner Brandon Terry Dustin Tingley Yuhua Wang

Photo not available: George Alvarez Felipe Pereda



FINANCIAL REPORT

LESLIE KIRWAN
DEAN FOR ADMINISTRATION AND FINANCE

FISCAL YEAR 2014-2015

We are pleased to present the Faculty of Arts and Sciences' financial results for Fiscal Year 2015, ending June 30, 2015.

This report is intended to present a summary of the FAS's finances and operations and to explain how our financial resources changed and how they were used during the year in support of our academic mission. Traditionally, we have presented these observations in a "managerial" format only. The managerial view focuses on the overall change in cash, where a surplus represents an increase in reserves and a deficit represents a decrease. The managerial view incorporates all cash expenses, whether generated through operations—the teaching and research activities at the FAS—or through capital expenditures (i.e., construction activities and the purchase of certain equipment). Last year, we also introduced a "Modified GAAP"1 (Generally Accepted Accounting Principles) operating result, describing the FAS's internal income statement in a way that more closely resembles the University's external statements. In this view, depreciation—or the annual wear and tear on physical assets such as buildings and equipment—is included as an operating expense, while principal payments on internal debt are excluded. For ease in comparing Fiscal Year 2015 to previous years, below we present both a consistently applied management view and a crosswalk to the Modified GAAP view.

It is important to note that these results are not audited, nor should they be confused with the audited financial statements of Harvard University as a whole, which will be published in October 2015. However, we have worked with the University to ensure that our figures and theirs agree.

Guide to the Accompanying Financial Statements

The FAS budget is both large (approximately \$1.3 billion) and highly decentralized, with significant spending under the direct control of over 150 separate departments, centers, libraries, and museums. The Consolidated Statement of Activity presents important categories of revenues and expenses of the FAS as a whole. This view combines what is typically called the "Core" of the FAS (which comprises the faculty, the College, and the Graduate School of Arts and Sciences) together with the other major affiliates of the FAS (i.e., Athletics, the Division of Continuing Education, Dumbarton Oaks, the Harvard College Library, the Museums, and the School of Engineering and Applied Sciences). Given that the Core constitutes about 73% of both the FAS Fiscal Year 2015 consolidated revenues and consolidated expenses, we also present a Fiscal Year 2015 Statement of Activity for just the Core.

Finally, we include a Consolidated FAS Balance Sheet that presents the FAS's major assets and liabilities at the end of Fiscal Year 2014 and Fiscal Year 2015.

Overview

This report will expand on the following key themes:

- The FAS is in a period of expected operating deficits as it meets strategic mission-critical commitments to fund its leading financial aid program and the renewal of the undergraduate House system.
- · However, the FAS completed Fiscal Year 2015 operations with a significantly smaller deficit than anticipated, measured in both the traditional managerial format and in Modified GAAP.
- The Harvard Campaign for Arts and Sciences and investments in Continuing Education are providing needed new funds, while traditional revenues remain constrained and under pressure.
- Research funding continues to receive enhanced focus in the current competitive market for top faculty and students, and internal sources of research funding take on a greater importance as external research funding has declined.
- Continued fiscal planning and prudence, reflected in a suite of management actions underway, are helping to ensure the sustainable excellence of our academic, physical, financial, and digital assets and to control the rise in our routine expenses.

Background

In previous annual reports, we have detailed the progress that the FAS has made in restoring fiscal stability since the economic recession. During the last several years, a variety of revenue and expense solutions and resource allocation tradeoffs were employed to reach balance, while maintaining essential investments in research, teaching, student financial aid, and infrastructure.

After achieving roughly balanced budgets in Fiscal Years 2012 and 2013, the FAS ran a deficit in Fiscal Year 2014 as a result of predicted revenue constraints and needed investments. However, the FAS sharply improved the result over earlier forecasts (\$45 million and \$60 million improvements in the managerial and Modified GAAP views, respectively).

Fiscal Year 2015 Results

The FAS completed Fiscal Year 2015 with a deficit in its unrestricted core operations and on an all-funds basis, from both a managerial and a Modified GAAP view. However, in each case, the actual deficit was smaller than earlier estimates and significantly improved over the Fiscal Year 2014 results. Major drivers of the improvement include better-thananticipated results of the ongoing Harvard Campaign for Arts and Sciences, strong early returns on the strategic investment in Continuing Education, and sustained focus and discipline in budgeting for routine operating expenses. Of concern was a decline in external sponsorship of research.

The results for Fiscal Year 2015 show improvements over the originally forecasted deficits across all comparisons. In the managerial view, the FAS improved its Consolidated, all funds result from a deficit of \$77.0 million in Fiscal Year 2014

to a deficit of \$11.7 million in Fiscal Year 2015, an improvement of \$65.3 million or 85%. The result for the Core alone was an improvement from a deficit of \$69.8 million in Fiscal Year 2014 to a surplus of \$8.4 million; however, there continued to be a deficit of \$29.4 million in Core unrestricted funds, though it was less than the \$55.1 million deficit in the prior year.

Comparing actual results to the budgeted forecast for Fiscal Year 2015 produces similar improvements. The actual Consolidated, all-funds deficit of \$11.7 million compared to a budgeted deficit of \$63.8 million. The actual Core Funds deficit was \$29.4 million, compared to the forecasted deficit of \$45.2 million.

In the Modified GAAP view, the Consolidated, all-funds deficit was reduced from \$54.7 million in Fiscal Year 2014 to \$39.5 million in Fiscal Year 2015, an improvement of \$15.2 million or 28%. The deficit had been projected to grow to \$83.7 million; therefore, the actual result of \$39.5 million is an improvement of \$44 million or over 50%.

Revenues. On a Consolidated basis, FAS total revenues grew by \$52 million or 4.1% over Fiscal Year 2014 levels. Revenue sources that increased over the prior year included Net Tuition (+8.1%, driven by a 3.9% rise in the tuition package for undergraduates, a 3.5% increase for graduate students, and significantly increased enrollment in the Division of Continuing Education, or DCE); Endowment Distribution (+3.3%); and Current Use Gifts (+21.2%, reflecting the ongoing Harvard Campaign for Arts and Sciences). Grants and Contracts

revenue fell by 5.7% in Fiscal Year 2015 impacting both direct and indirect sponsored revenues from federal and non-federal sources. Known declines in funds provided by the American Recovery and Reinvestment Act of 2009 (ARRA) explain part of the drop in external funding in Fiscal Year 2015, the first year in which a substantial decrease in sponsored revenues was experienced in the FAS. The FAS continues to assess the risks to external funding in a volatile environment.

The Fiscal Year results relative to the Fiscal Year 2015 budget were similar: Actual revenues showed a \$45 million or 4.0% increase. This increase was driven by two factors. Net Tuition increased more than planned for the reasons described above, and Current Use Gifts were \$24 million more than anticipated. This reflects the successful launch of the Campaign and the implementation of a new hybrid gift policy, which encourages donors to provide a share of certain major gifts in the form of current use funds in order to activate their philanthropy more quickly. It should be noted that the majority of these gifts have been made to fund specific initiatives, with related expenses to be incurred in future periods.

Expenses. FAS total expenses grew by \$36.3 million or 2.9% over Fiscal Year 2014 levels, which is below the 10-year average growth rate in expenses of 3.2%.

Contributors to this result included:

Salaries, Wages, and Benefits: Salaries, wages, and benefits increased by \$20.8 million or 3.5% over Fiscal Year 2014 levels. The majority of this increase was linked to the annual merit increases for FAS faculty and exempt and union employees. The remainder of the increase was the result

of other personnel transactions, including faculty turnover and replacements, modest staff position growth, filling of vacant positions, reclassifications, and equity adjustments.

- Supplies and Equipment: Supplies and equipment costs increased by \$1.6 million or 2.3% over the Fiscal Year 2014 level. Examples of expenditures in this category include laboratory supplies and materials, the cost of collections in the libraries and museums, non-capitalized equipment, and general office and computer supplies.
- Operation and Maintenance of the Physical Plant: The costs to operate the FAS's large physical plant, comprised of over 10 million square feet in 268 buildings, increased by \$7.9 million or 5.1% in Fiscal Year 2015. Drivers of this increase included rental and renovation costs related to the expansion of DCE programming; increased rental costs for swing housing to enable House Renewal; and excess snow removal costs resulting from the many winter storms.
- Transfers to the University: These transfers, including the University Assessment and transfers for Academic Programs, increased by \$1.5 million or 2.5%.
- Services Purchased: This category, which saw significant increases in recent years with the transfer of FAS Information

 Technology and Library staff and services to the University, grew more moderately by \$3.1 million or 2.1% in Fiscal Year 2015.
- Other Expenses: Other expenses increased \$2.3 million or 3.5% in Fiscal Year 2015.

 This category is comprised of many different expense types, including travel and events, telephone and photocopying, subscriptions, insurance, and postage.

Relative to the budget, Fiscal Year 2015 actual expenses experienced a decrease of nearly 1.5% or \$20 million.

Continued efforts to manage expense growth included the following practices:

- · Staffing. We continue to monitor personnel costs closely and look for opportunities for efficiency. Faculty and staff compensation (salaries, wages, and benefits) represents the largest component of the FAS budget. On June 30, FAS staff stood at a count of 2,586 Full-Time Equivalents compared to 2,558 FTE at the end of Fiscal Year 2014, a net increase of 28 positions. Position growth was concentrated in the College (+11) and DCE (+31), reflecting strategic growth plans in both units. These areas of growth were offset by small declines or stable levels in other units. For the second year in a row, there was virtually no growth in administrative departments.
- Efficiency in facilities operations, life-safety, and renewal. Our Physical Resources and Planning staff is dedicated to the proper stewardship and operations of FAS facilities through improved management systems, efficient building operations, and continuing investment in life-safety and renewal. In Fiscal Year 2015, we made significant changes to the internal management systems by which capital expenditures are tracked and controlled. Close management of building operations resulted in actual operating costs 6% (\$6.7 million) below budget despite last winter's record snowfall with removal costs exceeding \$1 million. Savings were achieved in most operating expense categories, notably in utilities, custodial services, and maintenance expenditures. As part of the Green House Gas emissions reduction program, the FAS completed the airflow reduction project in a major

laboratory section of the Northwest Building, resulting in annual savings estimated at \$500,000.

Across the FAS and its affiliates, we invested \$119.2 million in operating and capital renewal in addition to the large investment entailed in the House Renewal project. Part of this year's energy reduction effort and the renewal program included installing innovative "fan-wall" HVAC systems in the Hoffman Lab and the Biology Research Infrastructure (BRI) as well as new fan-coil units throughout the Music building. A major undertaking was initiated to modernize our electronic access control system and security equipment.

· Operational enhancements. In Fiscal Year 2015, the FAS continued to partner with colleagues at the University level and in other schools in planning, change management, and implementation of policy changes and clarifications, new administrative systems and upgrades of existing systems, and technology renewal. These efforts are designed to bring about operational or administrative efficiencies, address risks that have been identified through the University risk management process, and, in some cases, reduce costs. In addition to the new Student Information System (SIS) described below, examples of new academic and administrative systems in 2015 include: Aurora, a system to facilitate academic and staff appointment processes; Spectra and GMAS, designed to streamline aspects of grants management; business intelligence/ financial reporting modernization; and a new LMS (Learning Management System) to track internal training and development programs and outcomes. Technology renewal projects included: updating email and calendaring to

a consistent platform, planning to replace the enterprise-wide analog phone system with Voice over IP (VoIP); a new Identity and Access Management system; and Canvas, an industry-leading open software tool for the creation of course websites. Policy updates tackled issues related to reimbursement, internal controls, mobile devices, travel and business expenses, and procurement. A number of these efforts will be ongoing for several years.

These and other management actions—including changes in policies, practices, and systems—are designed to reduce routine administrative costs while preserving funds for academic priorities. In Fiscal Year 2015, efforts of this type contributed to year-over-year decreases in the costs of administrative departments of 1.9%, saving \$2.3 million.

Targeted Investments Included in the Fiscal Year 2015 Results

Faculty Searches. The FAS (including the John A. Paulson School of Engineering and Applied Sciences) conducted 56 ladder-faculty searches in Fiscal Year 2015, in line with our plan to slow down and consolidate after conducting 85 and 73 searches in Fiscal Years 2014 and 2013, respectively. As of September 2015, the FAS faculty count stands strong at 729 ladder faculty, little changed from the all-time high of 730 ladder faculty active last September. The increased search activity over the last several years has generated a steady stream of incoming faculty whose arrival on campus in the coming years will be reflected in future operating budgets. Our multiyear financial planning incorporates these future costs.

Financial Aid. Undergraduate aid has grown significantly in the decade since Harvard's leading-edge financial aid program (HFAI) was introduced, from \$73 million in Fiscal Year 2004 to \$170 million 10 years later. This growth has reflected a combination of policy changes; increased family financial need during the economic downturn; and increased efforts to recruit and retain an economically diverse student body. In Fiscal Year 2015, in addition to maintaining total undergraduate aid at the record high mark of \$170 million, the FAS introduced several investments in resources and programs developed in collaboration with current students, as well as new efforts to attract economically diverse students. These included: providing Spring Break meals on campus, programming for First Generation college students, and unveiling "The Harvard College Connection," which involves current College students in recruiting prospective students.

Between Fiscal Year 2008 and Fiscal Year 2015, the FAS's total financial aid budget grew by \$82 million, or 52%. This remarkable growth has been enabled in part by more than 1,500 individual endowment funds established by generous alumni and donors, including a transformational gift from Ken Griffin '89.

Student Information System (SIS).

The implementation of a new student information system aimed to clear impediments to cross-discipline teaching and learning, improve services available to faculty and students, and streamline daily business operations for administrative staff. Following two years of planning, collaboration, and implementation, the new system has successfully launched for faculty, students, advisers, and staff. Harvard now has a new portal supporting teaching, learning, and administrative

functions. With a robust platform and a cutting-edge user interface, the new system represents substantial technological renewal at Harvard. Dozens of outdated and stand-alone systems have been replaced by the new my.harvard student information system, and numerous academic policies and administrative practices have been updated and streamlined. The project team representing the FAS Registrar's Office, Harvard University Information Technology (HUIT), and the SIS Program met with scores of academic departments, committees, and individual deans and faculty members to seek input and provide information about the project. Faculty, students, and staff have been actively engaged in user testing and prototyping, and the SIS Program sought wide and deep collaboration from all FAS and other Harvard stakeholders.

Division of Continuing Education (DCE).

For over 100 years, the DCE has extended Harvard faculty to part-time learners with the academic ability, curiosity, and drive to succeed in Harvard courses. The DCE serves part-time learners, who now make up 80% of all higher education learners in the United States, and accommodates their need to learn while working and raising families. With over 1,100 evening, online, and summer courses, the division is funded entirely by tuition revenue and makes substantial financial contributions to the FAS and the University. The DCE is investing in new digitally enhanced teaching and learning tools, innovative pedagogy, and lifelong student relationship management. Under the leadership of Dean Hunt Lambert, the DCE is partnering across Harvard, as well as with other institutions, to create expanded course offerings building on established DCE strengths. While increasing quality and growing at 15% per

year over the past two years, the DCE business plan entails targeted investment in staff, learning technology, systems, partnerships across Harvard, and the space needed for program expansions. In Fiscal Year 2015, these investments totaled \$5.6 million and total revenue grew by \$10.5 million.

Capital Investments. In Fiscal Year 2015, the FAS capital program emphasized investment in renewal of our facilities and enhancing life-safety equipment, as well as completing several large projects supporting academic and research programs. New fire alarm systems were installed in the Straus and Pennypacker freshman dormitories, and numerous freshman proctor suites were renovated and improved throughout the freshman dormitories. A new fire alarm system has been installed in Houghton Library. An investment was made to improve emergency generator exhaust systems to ensure compliance with new environmental codes, and major electrical system upgrades were done in William James Hall and Bauer Laboratories. New and expanded restrooms were installed in the Loeb Drama Center, and the Lamont Library elevators were completely renovated. A major project investment made the Conant Chemistry Lab fully ADA-compliant, and new chilled water infrastructure was installed in the Museum of Comparative Zoology, which will support future replacement of window air conditioners in that section of the museum complex.

The FAS also completed a number of projects supporting our teaching, research, and student programs. A major project was completed on the third, fourth, and fifth floors of William James Hall to accommodate the long-planned move of the Social Studies department

into new space adjacent to faculty colleagues, and to provide for the expansion of Sociology. This was enabled by the previous year's relocation of Social Anthropology into the newly renovated Tozzer Anthropology Building. These projects were of the highest priority of the Division of Social Sciences and support the consolidation of the division's academic departments. In Fiscal Year 2015, the FAS continued the ongoing investment in classroom improvements and technology. Large lecture halls were renovated in the William James Hall and Jefferson Laboratory along with smaller classrooms in the Science Center and numerous other facilities.

Investments were made in support of many new faculty appointments and promotions to tenure and senior faculty retentions. There were a number of such projects, but most notable are those in Chemistry and Chemical Biology, Visual and Environmental Studies, Molecular and Cellular Biology, Organismic and Evolutionary Biology, and Psychology, as well as three faculty appointments in Human and Evolutionary Biology.

House Renewal. Fiscal Year 2015 saw significant progress in the FAS's massive undertaking to renew the undergraduate residential houses. The second test project, Leverett House's McKinlock Hall, received its Certificate of Occupancy early in Fiscal Year 2015 and was ready for student move-in at the start of Academic Year 2014-15. It was completed on time and on budget. Dunster House, which is the first renewal project of a full house, was substantially completed during Fiscal Year 2015. Dunster House received its Certificate of Occupancy early in Fiscal Year 2016 and was ready for move-in at the start of Academic Year 2015-16—once again, on time and

on budget. To enable the Dunster House project and future House Renewal projects, the former Inn at Harvard was converted to additional swing housing. Fiscal Year 2015 costs included operating costs for all swing housing and rental costs for swing spaces outside the Inn. Finally, design and planning progressed for the next project in Winthrop House, scheduled for construction in Academic Year 2016–17 following a planned year of strategic assessment of all execution, programmatic, and financial aspects of the project.

The FAS and the University together have devised a multiyear funding plan for House Renewal. This plan, which is being reviewed and may be revised as part of the Strategic Assessment, includes the use of FAS endowment funds, philanthropy, reserves, and both incremental and non-incremental long-term debt and cash from operations. As of June 30, 2015, the Corporation has authorized the FAS to spend \$439 million on House Renewal.

The project affects the Fiscal Year 2015 results in two ways. First, the FAS invested \$140 million in project construction and planning, as reflected in fixed assets. Second, \$6.7 million in housing costs were incurred to accommodate displaced students.

Balance Sheet View

As set forth in the Consolidated Balance Sheet, total net assets for the FAS rose by \$711.7 million or 3.9% during Fiscal Year 2015, from \$18.1 billion at the close of Fiscal Year 2014 to \$18.8 billion at the close of Fiscal Year 2015. In contrast, between Fiscal Year 2013 and Fiscal Year 2014, the FAS's net assets rose by 11% or \$1.8 billion.

Factors contributing to the Fiscal Year 2015 increase include: investment returns of 5.8% in Fiscal Year 2015, reflected in a 1.6% increase (+\$253 million) in long-term investments (primarily endowment) after withdrawals for operations and decapitalizations; and a 7.2% increase (+\$124 million) in fixed assets, net of depreciation. The largest contributor was an increase of 87% (+\$417 million) in pledges receivable, reflecting continued success of the Harvard Campaign for Arts and Sciences in the second year of its public phase.

At June 30, the FAS's long-term investments (primarily endowment) stood at \$16.1 billion, up 1.6% from \$15.8 billion a year ago. In contrast, this figure was \$16.6 billion at the close of Fiscal Year 2008, before dipping to a low of \$11.6 billion at the end of Fiscal Year 2009. At \$16.1 billion, the FAS's endowment position at June 30, 2015 was approximately 97% of what it was on June 30, 2008. Put another way, the endowment has not yet recovered the final 10% of the \$5 billion lost in the downturn. As we approach the nominal value of the endowment prior to the recession, it is important to realize the losses of real value over that time, even in a relatively low interest environment. Adjusting for higher education inflation, the endowment would need to be \$19.1 billion today, significantly more than the actual value of \$16.1 billion, to have the same buying power today as in Fiscal Year 2008.

The Capital Campaign: Aligned with Our Academic Aspirations and Financial Needs

The six priorities of the Harvard Campaign for Arts and Sciences, whose public phase formally launched in Fiscal Year 2014, provide a framework for the FAS's ambitions in the coming years. Each priority is an essential component of Harvard's efforts

to provide an unparalleled undergraduate and graduate education for the 21st century. Campaign commitments protect and enhance core mission-related initiatives while providing invaluable flexibility with limited unrestricted funds. Thus—while not a panacea—the Campaign is directly addressing both academic priorities and financial pressures in the FAS. As described above, growth in Current Use Gifts raised through the Campaign helped significantly improve the Fiscal Year 2015 results.

The Outlook: Fiscal Year 2016 and Beyond

The FAS budget for Fiscal Year 2016 was built on an assumption of a 6% increase in endowment distribution revenues. This endowment distribution is meaningfully higher than in recent years and was enabled by investment earnings of 15.4% in Fiscal Year 2014. Since this earnings outcome is unlikely to be repeated in the near term, the University's guidance was that these revenues be split into two portions: 4% for ongoing expenses and an additional 2% for one-time uses. At the time of our budget submission, we projected a Modified GAAP deficit of \$54.4 million. It is our intent to improve that result over the course of the year as we have done in each of the last several years.

Looking ahead, as part of a University-wide effort the FAS has developed a 10-year financial model taking into account revenue and expense forecasts as well as academic, operating, capital, and other needs. This multiyear view, which currently projects a deficit position that grows to a level representing as much as 8% of the total FAS budget, demonstrates the need for continued discipline and prioritization to bring operating expenditures in line with revenues, while

providing appropriately for intellectual investments as well as House Renewal and other facilities' renewal needs. We are working diligently to refine the plan as well as to identify the additional steps and actions that will help us manage costs and improve the long-term outlook. Ongoing upward pressure on some of our expense categories, coupled with, at best, modest increases to our key revenue sources for the foreseeable future, will demand our continued focus and innovation. This is consistent with the suite of management actions that have helped control the FAS expense growth in recent years.

Ensuring that the FAS is an exciting and productive environment for intellectual endeavors by recruiting new faculty and supporting the teaching and scholarship of our existing faculty is a key priority for the FAS. As such, faculty compensation and support for faculty research is one of our fastest-growing costs. A goal for the current fiscal year and beyond is to enhance our internal program of research support to lessen faculty anxiety in an increasingly competitive market and a challenging external funding landscape. Among the objectives of the effort will be to explain more clearly how the FAS will invest in faculty and their scholarship over the course of their careers at Harvard; aid faculty in navigating the range of funding opportunities available within Harvard; address some of the inequity in our current system by making allocation processes more systematic, transparent, and predictable; and ensure that our funding system does its part to advance the leading edge of research. In addition to providing for the financial and physical assets of the FAS, funds for the intellectual and digital needs of the faculty must be prioritized.

With a national spotlight on the growing costs of higher education and concerns about affordability for students and families, revenue from tuition is under tremendous pressure. Annual increases in the cost of attendance are expected to remain modest in the coming years. At the same time, our dedication to sustaining Harvard's "best in class" financial aid program remains steadfast, though keeping this commitment intact in recent years has exerted considerable pressure on the unrestricted budget. In addition, tackling the long-deferred renewal of the undergraduate residential houses is expected to require significant draws on reserve funds in addition to endowment decapitalizations and the philanthropy that will be essential to making the program possible.

Modified GAAP View

In connection with these planning efforts, the University has introduced Generally Accepted Accounting Principles (GAAP) or, more specifically, "Modified GAAP" income and cash statements as a standard applying to the component schools as well as to the University as a whole. "Modified GAAP" is described in more detail in Footnote 22 of the accompanying Faculty of Arts and Sciences Managerial Financial Report, which since Fiscal Year 2014 has included a detailed crosswalk from the managerial view to the Modified GAAP view. Among the largest differences from the FAS managerial view is that Modified GAAP includes depreciation expense and excludes principal payments in the income statement. As displayed

FISCAL YEAR 2015 FAS MANAGERIAL TO MODIFIED GAAP CROSSWALK			
NET CHANGE IN FISCAL YEAR ACTIVITY (IN MILLIONS)	\$ (11.7)		
Adjustments			
Remove Principal	50.0		
Remove Non-Operating Cash	43.8		
Add Depreciation	(121.6)		
TOTAL ADJUSTMENTS	(27.8)		
MODIFIED GAAP RESULT	\$(39.5)		

Financing activities are comprised of transfers from/to endowment (\$70.1 million), new debt (\$51.5 million), construction gifts applied (\$39.1 million) and distributions from split interest agreements and other General Operating Account changes (\$51.5 million).

above, depreciation expense was \$121.6 million, roughly equivalent to 10% of the FAS budget and \$71.6 million more than principal payments. With large capital investments underway and planned in the near future, this newly recognized expense will continue to rise.

At this time of constrained revenues and large one-time outlays for House Renewal—our biggest capital renewal need—the FAS is not in a position to fully cover depreciation with operating revenues in the near term. Consequently, the FAS's Modified GAAP view results in material current and projected deficits for the FAS. As the House Renewal and other FAS renewal projects demonstrate, we share the commitment to preserving our capital assets, and aspire to make progress toward the GAAP standard over time in balance with our academic priorities.

As described above, for Fiscal Year 2015 the FAS managerial result, or Net Change in Fiscal Year Activity, was a deficit of \$11.7 million. The table above provides a crosswalk from that figure to the Modified GAAP deficit of \$39.5 million, using line items introduced in the University's Modified GAAP cash statement.

As previously noted, the Fiscal Year 2015 Modified GAAP deficit is \$15.2 million or 28% less than the result in Fiscal Year 2014.

The financial performance and investments described in this report reflect the leadership, creativity, and hard work of colleagues throughout the FAS and business partners elsewhere at Harvard. Though continued discipline will be required to build upon these gains, your efforts have positioned the FAS to withstand continuing fiscal challenges and enable key investments in our academic mission.