

Fifth-Year Interim Report to the New England Association of Schools and Colleges Commission on Institutions of Higher Education

Yale University New Haven, Connecticut August 15, 2014

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INTRODUCTION

Yale University's 2014 Fifth-Year NEASC Interim Report offers the opportunity not only to reflect on changes since the 2009 Self Study, but also to consider the future. We address the six areas identified for special emphasis by the Commission on Institutions of Higher Education, discussing actions taken and making projections about what needs continued attention. We review the eleven CIHE Standards, reporting on significant changes since our 2009 evaluation as well as how Yale continues to meet the standards and projects future directions. In Standard Four, The Academic Program, we focus on the Faculty of Arts and Sciences, which teaches over two-thirds of Yale students and has the largest contingent of Yale faculty. For the remaining ten standards, the Report addresses the entire university. Finally, we consider Assessment, Retention, and Student Success – especially for Yale College undergraduates, but also for other parts of the institution; and the concluding Plans section presents President Peter Salovey's "Emerging Vision for Yale."

Preparation of this report was overseen by a steering committee composed of President Peter Salovey, Provost Benjamin Polak, former Dean of Yale College Mary Miller, Deputy Provost for Academic Resources J. Lloyd Suttle, Deputy Dean of Yale College Joseph W. Gordon, and Yale College Associate Dean for Assessment Judith Dozier Hackman, who also coordinated development of the report and led a working group composed of:

- Joseph W. Gordon, Deputy Dean of Yale College
- Mark Schenker, Senior Associate Dean, Yale College; Dean of Academic Affairs
- Russell Adair, Acting Director of the Office of Institutional Research
- Nina Glickson, Director of Correspondence & Archives, Advisor on Student Affairs, Office of the President
- Kelly C. McLaughlin, Deputy Director, Center for International and Professional Experience
- Matthew Lawrence, Research Associate, Office of Institutional Research
- Pamela Schirmeister, Senior Associate Dean of the Graduate School and Dean of Strategic Initiatives in the Graduate School, Yale College, and the FAS; Lecturer, English

Other members of the Office of Institutional Research collected information for the Interim Report Data Forms, and responses for each of the concerns and standards were drafted by the faculty and staff listed at the beginning of each section. Many of the contributors helped prepare the 2009 Self Study although others assumed office after the last accreditation review. This interim report benefits both from continuity and fresh perspectives.

INSTITUTIONAL OVERVIEW

Like any institution or society, Yale is a partnership between those who have gone before, those who are here now, and those who are yet to come. As partners in such a society we are the custodians of its character and purposes. As the warden of its treasures we have the opportunity and obligation not just to conserve them but to augment them for the future use of those who will enter into this partnership with us long after we have gone. And participation in such a compact confers a kind of immortality upon us, because it amplifies our energies and accomplishments while it protects them against the erosions of time and the depredations of change.

—Martin Griffin, Dean of Undergraduate Studies, 1976–1988

Founded in 1701, Yale University comprises the following fourteen schools, which in fall 2013 enrolled 12,109 students: Yale College (founded in 1701), the School of Medicine (1813), the Divinity School (1822), the Law School (1824), the School of Engineering and Applied Sciences (1852), the School of Art (1865, first as the School of Fine Arts), the School of Architecture (1872), the Graduate School of Arts and Sciences (1892), the School of Music (1894), the School of Forestry & Environmental Studies (1900), the School of Public Health (1915), the School of Nursing (1923), the School of Drama (set up in 1925 and given its independence as self-governing in 1955), and the School of Management (1974). All of these schools are supported by the Yale's extensive laboratory, gallery, library, and museum resources.

This interim report is submitted at a time of major transition. In August 2012, President Richard C. Levin announced that he would step down at the end of that academic year. A Presidential Search Committee was convened by the Senior Fellow of the Yale Corporation and expanded the scope set by the 1993 presidential search by appointing trustee liaisons to faculty, students, alumni, and staff who worked in conjunction with campus counselors to ensure that there were ample opportunities for wide consultation. On July 1, 2013, Yale welcomed its 23rd president, Peter Salovey, whose past roles at Yale included provost (2008-2013), dean of Yale College (2004-2008), dean of the Graduate School of Arts & Sciences (2003-2004), and chair of the department of psychology (2000-2003).

President Salovey's previous position of provost is now held by Benjamin Polak (former chair of the department of economics, 2010-2013), who took office as provost in January 2013. There also are major changes underway in the Faculty of Arts and Sciences (FAS). President Salovey and Provost Polak announced in November 2013 the appointment of an ad hoc committee to look at FAS decanal structures at Yale and other institutions to assess possible changes to Yale's FAS governance structure. The committee was asked to offer answers to two questions:

- What are the pros and cons of adding a dean of the Faculty of Arts and Sciences to the current FAS decanal structure (that is, the structure that currently consists of a dean of Yale College and a dean of the Graduate School)?
- What are the pros and cons of adopting a system that includes divisional deans (humanities, social sciences, natural sciences) in place of some of the feature(s) of the current Yale structure (e.g., area-specific deputy provosts, divisional directors, etc.)? Are "sub-divisional" structures needed?

To encourage a broad and open process of consultation with faculty across the FAS, the Ad Hoc Committee on Decanal Structures solicited thoughts, advice, and recommendations from all members of the FAS, either through emails, participation in a series of open forums, or direct communications with members of the committee. In February 2014, President Salovey accepted the recommendation of the Ad Hoc Committee on Decanal Structures to create the position of dean of the Faculty of Arts and Sciences, and appointed a faculty committee (with student representation) to offer recommendations about candidates for this and other FAS decanal positions. Tamar Gendler (deputy provost of humanities and initiatives, 2013-2014, and chair of the department of philosophy, 2010-2013) became the first person to hold the role of dean of the Faculty of Arts and Sciences and began a five-year term on July 1. Also as of July 1, Lynn Cooley (director of the combined program in the biological & biomedical sciences, 2001-2014) became dean of the Graduate School of Arts and Sciences, and Jonathan Holloway (chair of the department of African American studies, 2013-2014, master of Calhoun College, 2005-2014, and chair of

the Council of Masters, 2009-2013) became dean of Yale College, also both on five-year terms. Furthermore, for the first time in its history, Yale expects to create an elected FAS Faculty Advisory Senate which will begin to operate in 2015..

As President Salovey said in an email about these appointments: "With the creation of a dean for the Faculty of Arts and Sciences, the deans of the Graduate School and Yale College will be able to focus more attention on the quality of graduate and undergraduate education, respectively, including academic curriculum and student life. Faculty recruitment, appointment, tenure, and promotion will be handled primarily by the dean of FAS. The dean of Yale College will have a key role in leading the expansion of Yale College and the formation of two new residential colleges. The dean of the Graduate School will continue to advance graduate student preparation for scholarly and other professions, as well as focus on the campus experience for graduate students."

Throughout this report, there are references to how these new leaders, offices, and organizational structures will uniquely shape the opportunities and challenges that Yale will face in the five years before its next comprehensive self-study. As this report also makes clear, the historic changes will be guided by the vision of shared responsibility and common purpose that President Salovey described in his inaugural address:

"Our task – even while we grow in size, even while we commit to being a more diverse faculty, staff, and student body; more cross-disciplinary, and more global – is to retain Yale's focus on the ties that bind us together, the sense of being a small, interdependent community, but one with an impressively broad scope. This intimacy and shared sense of purpose is what generates Yale's distinctive spirit. It also allows us to aspire to make the university even more unified. As President Charles Seymour said on the day of his inauguration, "We are a university; that is; we are all members of a body dedicated to a single cause. There must be among us distinctions of function, there can be no division of purpose."^[1]

RESPONSES TO AREAS IDENTIFIED FOR SPECIAL EMPHASIS

Following Yale University's 2009 Self-Study and visit by the NEASC team led by Northwestern University's President Morton O. Schapiro, the NEASC Commission on Institutions of Higher Education asked that in its fifth-year interim report the university give emphasis to its continued success in the six areas of concern noted below. Responses for the first four concerns were submitted by Yale staff and faculty familiar with the four areas, often those who helped prepare our 2009 Self-Study. Comments about Concerns 5 and 6 appear later in this report.

- 1. Financial Resources Allocating financial resources, including resources from the endowment, to supports its programs and services;
- 2. West Campus Implementing plans for the West Campus, including the development of interdisciplinary programs in the life sciences;

^[1] The inaugural address of President Charles Seymour, October 8, 1937. That 'single cause' according to Seymour, is "the improvement of learning."

- 3. Graduate Student Facilities & Campus Life Improving the experience and reported satisfaction of graduate students, with regard to the physical facilities available to graduate students as well as opportunities to participate in campus life;
- 4. Leadership and Faculty Diversity Achieving its goals for the diversity of faculty and administrators;
- 5. Assessment Using quantitative as well as qualitative measures of student learning and using the results for planning and decision making, including the allocation of resources;
- 6. Committee on Yale College Education Follow-Up Continuing to implement the recommendations of the Committee on Yale College Education (CYCE) report and to assess the impact of changes made.

Area 1. Financial Resources¹

Submitted by: Robert J. Herr, Associate Controller Stephen Murphy, Associate Vice President & University Controller

Financial Resources - Allocating financial resources, including resources from the endowment, to supports Yale's programs and services (Standard 9.1).

Despite Yale's strong financial position and prudent management practices, the 2008 financial crisis caused an imbalance in its operating revenue and operating expenses that required action. The approach was to adjust to the financial decline over a multi-year period in order to shield core activities of teaching and research as much as possible from the downturn. We delayed creating new programs but did not eliminate existing ones, and we continued to expand research and invest in clinical activities because of great opportunities for Yale's exceptional scientists and clinicians. Yale has instituted strong internal financial management policies and practices that have allowed it to maintain its strong financial position. The key financial practices that will allow the university to remain financially strong and attain financial equilibrium over the long term include:

- The endowment spending policy is designed specifically to stabilize annual spending levels and to preserve the real value of the endowment portfolio over time. The spending policy attempts to achieve these two objectives by using a long-term targeted spending rate combined with a smoothing rule, which adjusts spending gradually to changes in market value.
- The University Investment Asset Allocation is a key component to successful endowment performance. The need to provide resources for current operations and the desire to preserve the purchasing power of assets dictate a heavy allocation to equity and non-traditional asset classes. The university strategy has served the university well by providing significant operating revenue and preserving the real value of the endowment.
- Capital replacement charge is an annual budget charge established to set aside sufficient operating funds for continued capital maintenance throughout the university. The charge is the annual equilibrium level funding target for internal purposes that is needed to maintain Yale's facilities in good condition on a consistent basis, thus avoiding deferred maintenance.

¹ See Standard 9 Financial Resources (p. 35) and the Yale 2012-2013 Financial Report in attached Appendices for more financial details.

- The defined benefit plan funding formula is a calculation of the amount needed to annually fund the defined benefit pension and retiree health plan that will move the funded status to a fully funded amount over time.
- The Operating and Capital Budget process is rigorous and includes identifying the necessary costs needed to meet teaching and research mission goals at a continually high level within the resources available. Enhancements to efficiency and increases in productivity are sought each year. The process begins with a high level multi-year financial plan to identify long term opportunities.

Because of these strategies, Yale remains financially strong, with university assets totaling \$22.5 billion as of June 30, 2013. Moving forward, Yale will continue to pursue strong internal financial management policies and practices in order to align resources with its ambitious goals.

Operating and Capital Budget

Looking beyond fiscal 2013 the university's current budget reveals a shortfall in operating revenue compared to budgeted expenses (including strategic investments) for the next few years. Plans are being developed that address the need to balance operating revenue and expenses. Management is investing in new financial and administrative systems and the redesign of related processes to create efficiencies and lower costs. In addition, newly implemented Shared Services practices will allow for additional efficiencies that are expected to lower costs in the long term.

The university has identified specific revenue and expense initiatives to bring operations into equilibrium. The primary action to be taken to balance the operating budget is to reduce administrative expenses by 10% over the next five years. The university is also planning to explore opportunities to reduce the cost of renovating campus buildings. Yale continues to enjoy the advantages of a generous constituency whose donations enable many of our strategic initiatives. President Salovey and Vice President for Development Joan O'Neill are planning where and how to focus development efforts for maximum positive impact on the university's future.

Investments and Liquidity

Steps taken to improve liquidity following the financial crisis in fiscal 2009 included a combination of temporary and permanent actions. These measures included medium-term borrowing in the taxable public markets and negotiating reductions in existing capital commitments to many private equity and real estate partnerships. Significant analytical effort was employed to optimize liquidity within the university's target portfolio asset allocation framework and to further improve illiquid asset class models and liquidity forecasts.

In October 2009 Yale issued \$1 billion in taxable fixed rate debt for a term of five years. Proceeds of this issuance were used to retire \$800 million in outstanding taxable commercial paper and add \$200 million to working capital. As of June 2013 \$500 million of this issue had been redeemed. The university plans to redeem an additional \$250 million at or prior to maturity. This debt issuance provided an effective liquidity bridge for Yale from the uncertainties surrounding the financial crisis to the recovery of the financial markets.

In the aftermath of the financial crisis the university had uncalled capital commitments to private investment partnerships equal to over 50% of the endowment value. Through a disciplined process of negotiating legal reductions to existing commitments, appropriately sizing new commitments and contributing required capital, this ratio fell to 35% in 2010 and currently stands at approximately 20%.

Although the growth in endowment value contributed to improvement in the ratio, the achievement of over \$1 billion in commitment reductions in the year following the financial crises was significant.

At June 30, 2009, the endowment's illiquid asset classes represented 56% of the portfolio. Through optimization techniques and scenario analysis, the Investments Office determined a target level that would provide for the necessary portfolio liquidity without adversely affecting desired risk and return objectives. Four years into this determination, the endowment remains short of this goal, but is on a glide-path to achieving the target over the next couple of years. Strengthened illiquid asset class cash flow models have proved accurate in predicting cash flows over the past four years and liquidity metrics are reviewed quarterly by the university's Investment Committee.

Area 2. The West Campus

Submitted by:

Scott Strobel, Vice President for West Campus Planning & Program Development; Professor, Molecular Biophysics and Biochemistry

The West Campus - Implementing plans for the West Campus, including the development of interdisciplinary programs in the life sciences (Standard 2.3).

Yale University was in the midst of a \$1 billion upgrade of its science and medical facilities in 2007 when it was presented with a unique opportunity: the 136-acre Bayer HealthCare campus, located seven miles from New Haven, became available for purchase for just \$109 million—a price that included seventeen buildings furnished and outfitted with equipment and bioscience laboratories. The benefits to the university were clear: the addition of a ready-made, state-of-the-art research campus would allow the growth of Yale's science and medical facilities "to accelerate at an unprecedented level—potentially making it possible for Yale scientists to develop new discoveries, inventions, and cures years earlier," said then President Richard C. Levin when announcing Yale's purchase of the Bayer complex. Today that potential is being realized, and West Campus has become both a vital part of Yale and a hub for innovation and exploration. Furthermore, it has become a community, peopled with scientists, engineers, artists, scholars, students, and the administrative staff who support them.

The Yale West Campus (YWC) is situated on 136 acres of land that span the two townships of West Haven and Orange. It consists of 1.6 million square feet of office, research and warehouse space distributed among seventeen buildings. The space includes five research laboratory buildings, a vivarium, four large office buildings, a warehouse, a conference facility, a cafeteria, a childcare center, and a manufacturing facility. Yale's vision is to use this phenomenal facility to strengthen the university's programs in science, medicine and engineering while promoting research and teaching overall.

The West Campus has quickly become both a vital part of Yale and a hub for innovation and exploration. The addition of a ready-made, state-of-the-art research campus has allowed for the growth and development of Yale's science and medical facilities. Since the 2009 self-study, the West Campus has developed an infrastructure that promotes new insight in the sciences and arts with the establishment of six new interdisciplinary research institutes and four scientific core facilities. The campus is home to an international hub for the study and conservation of the world's shared treasures and, most recently, the campus expanded its educational mission by becoming the new home of the Yale School of Nursing.

Research Institutes and Scientific Core Facilities

Six faculty-led research institutes and four scientific core facilities provide the intellectual framework for the West Campus. Each faculty member has an institute affiliation on the West Campus and a faculty appointment in a home department. This structure creates a unique multidisciplinary environment that is creating bridges between the Faculty of Arts and Sciences (FAS) and Yale School of Medicine (YSM) faculty while strengthening science and engineering interactions across the university.

YWC Institutes. The YWC institutes bring together outstanding scientists from diverse disciplines to work side by side using innovative technologies to address important issues in health, energy, and the environment. The research institutes connect experts from Yale's top-ranking programs in the physical, biological, engineering, and medical disciplines, as well as other departments, and focus on a particular area of study. This mingling of different perspectives inevitably sparks new ideas that can transform the course of the research and inspire new discoveries.

- *The Chemical Biology Institute* explores how to design and synthesize new molecules by taking advantage of cells' natural properties to create chemical compounds that treat developmental disorders, cancer, and neurodegenerative disease. Disciplines include: Chemistry, Molecular Biophysics and Biochemistry, and Molecular, Cellular, and Developmental Biology.
- *The Energy Sciences Institute* focuses on emerging challenges facing the environment and energy sectors, such as solar energy, alternative fuels, and carbon mitigation. Disciplines include: Chemistry, Geology & Geophysics, Chemical & Environmental Engineering, Mechanical Engineering & Materials Science, and Applied Physics.
- *The Cancer Biology Institute* scientists will seek to identify potential new drugs and perform early-stage development work on innovative cancer therapies. With the support of private companies like Gilead Sciences Inc. and core facilities like the Center for Genome Analysis, these drugs will be targeted and approved for treatments of patients at Smilow Cancer Hospital at Yale-New Haven.
- *The Microbial Diversity Institute* is dedicated to exploring the still largely unknown world of microbes and how they govern processes that control the functions of all living creatures. Disciplines represented include Ecology and Evolutionary Biology, Geomicrobiology, and Microbial Pathogenesis.
- *The Nanobiology Institute* was established by James Rothman, the Nobel Prize winning chair of cell biology and professor of chemistry. It focuses on the study of cell biology and biophysics with the goal of designing new uses for living and synthetic materials at the nanoscale. Disciplines represented include Cell Biology, Molecular Biophysics and Biochemistry, and Cellular and Molecular Physiology.
- *The Systems Biology Institute* aims to find new ways to organize and analyze the massive amounts of biological data now available to understand how life orchestrates thousands upon thousands of molecular events at lightning speed. Disciplines include: Physics, Computer Science, Mathematics, Engineering, Biology, Ecology and Evolutionary Biology, Chemistry, Cellular and Molecular Physiology, and Molecular, Cellular, and Developmental Biology.

YWC Core Facilities. The West Campus core facilities support the work of the research institutes and seek to provide technical services in support of research across the university. Each core has faculty oversight with work performed by technical staff.

• *The Yale Center for Genome Analysis* produces the equivalent of more than 3,000 complete human genome analyses per month, yielding information that drives research not only in human biology and medicine, but also in every area of the life sciences.

- *The Yale Center for Molecular Discovery* is uniquely equipped for studies of how chemical compounds affect cells and their ability to regulate life processes on a molecular level, helping bridge the gap between promising drug leads and the development of actual new drugs.
- *The High-Performance Computing Center* is a state-of-the-art computer storage hub, which powers a range of research initiatives led by Yale professors and graduate students across the university.
- *The YWC Analytic Core* supports various laboratories on campus by housing and maintaining a variety of high value instruments used for biological, chemical, or other research projects.

Arts and Sciences Interface

The West Campus also seeks to provide an interface between the arts and the sciences. Lisbet Rausing '78 and Peter Baldwin '78 recognized this distinctive connection when they provided a \$25 million gift to create the Yale Institute for the Preservation of Cultural Heritage. This institute is dedicated to improving the science and practice of art conservation around the world with digital and other technologies. These include employing nanotechnology to slow the decay of artworks; creating specialized, computerized tools to care for ancient mosaics; and utilizing 3-D technology to digitize and study collections. Its researchers and artists collaborate closely with staff from the university's libraries and museums to care for the university's collections and treasures.

The West Campus is also home to two other centers that exemplify artistic and cultural innovation:

- *The Center for Conservation and Preservation* supports conservation research for all of Yale's cultural properties, including the collections from the Yale University Art Gallery, the Peabody Museum of Natural History, the Center for British Art, the Collection of Musical Instruments, and the university's libraries.
- *The Yale Digital Collections Center* is working to make Yale's cultural heritage and natural history collections digitally accessible to the world. The facility serves as a centralized home for the university's digital collections.

Yale School of Nursing

The Yale School of Nursing (YSN) permanently moved to West Campus in summer 2013. The school's 450 students, staff, and faculty brought the first major educational initiative to the campus. YSN's goal of promoting better health care through scholarship, practice, and research makes the school a natural fit for West Campus. Interdisciplinary research programs at YSN span the human developmental spectrum and address health care needs in many contexts. On the West Campus, YSN joined an established and growing number of Yale scientists, engineers, medical researchers, artists, and natural historians, which have already spawned several unique collaborations.

Student Activities

The presence and engagement of undergraduates, graduate students, and post-doctoral fellows is essential to development of the West Campus. Despite the geographical distance from New Haven, Yale students have seen YWC as a concrete resource for student activities. For example, West Campus has become home to Yale's International Genetically Engineered Machine Competition (iGEM) student teams. The international program dedicated to education and competition of undergraduates and the advancement of synthetic biology has found YWC to be an ideal environment to foster scientific research and collaboration. Another example was Yale's first official hack-a-thon in November 2013. The event

brought together more than 900 students from public and private institutions of higher education on the east and west coasts and as far away as England with the goal of developing new technologies.

Assessment of West Campus

The progress of West Campus implementation is regularly reviewed by the Yale Corporation via site visits and presentations. The review occurs on a biannual basis.

Area 3. Graduate Student Facilities & Campus Life

Submitted by:

Pamela Schirmeister, Senior Associate Dean of the Graduate School and Dean of Strategic Initiatives in the Graduate School, Yale College, and the FAS; Lecturer, English

Graduate Student Facilities & Campus Life - Improving the experience and reported satisfaction of graduate students, with regard to the physical facilities available to graduate students as well as opportunities to participate in campus life (Standard 6.8).

We are pleased to report making good progress on enhancing graduate student life, both in terms of improved housing opportunities and in relation to an increased array of student services.

Housing Improvements

Under the auspices of the newly created position of vice president for student affairs (8/2012), a Student Housing Advisory Committee provided important input to help the university assess its graduate housing programs. In the spring of 2013, the officers of the university articulated a commitment to provide better graduate housing, both on and off campus, as well as improved student services for graduate and professional students. A study concluded in fall 2013 indicated sufficient on-campus housing, directing our efforts to improving existing housing and locating more and better off-campus housing. The summer of 2013 saw the completion of critical upgrades and renovations to the largest of the on-campus units as well as news that private developers would bring to market roughly 460 new units in proximity to campus by 2015. The Law School has announced its plans to convert the former Swing Dorm to law student housing and student service space by 2016.

Campus Life

On the student services front, we continue to improve and expand the services offered through the McDougal Graduate Student Center. Recent organizational changes will enable us to offer a larger suite of student programming across a spectrum of activities. Specifically, Graduate Career Services has been moved into the new Office of Career Strategies, providing graduate students with substantial employer relations resources and more individual counselling hours. We have also increased our discipline-specific teacher training and have moved the former Graduate Teaching Center into the new Yale Center for Teaching and Learning. This consolidation enables us to provide more comprehensive services to graduate students seeking pedagogical training. In addition to these ongoing programs focused on the professional development of graduate students, we have implemented mandatory professional development seminars for all incoming doctoral and master's students that include training in academic integrity and the prevention of sexual misconduct. Lastly, a more collaborative arrangement between student affairs offices at Yale College and the Graduate School will afford graduate students better access to the cultural centers formerly used primarily by undergraduates.

Area 4. Leadership and Faculty Diversity

Submitted by:

Julia Potter Adams, Former Deputy Provost for the Social Sciences; Professor, Sociology and International & Area Studies

James J. Antony, Associate Provost; Professor Adjunct, School of Management

Leadership and Faculty Diversity - Achieving Yale's goals for the diversity of faculty and administrators (Standard 11.5).

The 2009 report acknowledged the need to diversify Yale's leadership. Below we show percentages of women and minorities for three categories: senior staff, senior advisory groups, and faculty.

Senior Staff

Although the percentage of diversity positions at the level of college master and administrative deans was showing great progress at the time of the 2009 report, higher levels of staff needed to be addressed. Part of the difficulty in increasing numbers is the low rate of turnover in these positions and the institution's commitment to maintain a lean administration. As positions in the administration become open, Yale continues to recruit from the most diverse pool possible. Below we present the diversity of senior staff both for 2008-2009 and 2013-2014. Although the full complement of senior staff is likely to change by the fall semester, as of July 1, 2014 the tables below show parity in gender at the levels of school deans and college masters (50%); plus, the new Yale College Dean Jonathan Holloway is African-American, the first minority dean since Lloyd Richards served as dean of the Yale Drama School in 1971-1991. At present, both the ten university officers and twelve residential college masters are 50-50 men and women; and 56% of university officers are women.

2008-2009									
	Total Women % Minorities								
Officers	8	4	50%	0	0%				
Executive Management ²	75	44	59%	6	8%				
School Deans ³	14	2	14%	1	7%				
College Masters	12	3	25%	2	17%				
Administrative Deans ⁴	70	31	44%	15	21%				

2013-2014 (Fall 2013)								
	Total	Women	%	Minorities	%			
Officers	9	5	56%	1	11%			
Executive Management	76	47	62%	8	11%			
School Deans	14	3	21%	0	0%			
College Masters	12	5	42%	3	25%			
Administrative Deans	59	29	49%	12	29%			

² "Executive Management" includes direct reports to university officers.

³ "School Deans" include FAS Deans (two in first two time periods and three starting July 1, 2014 – Yale College, Graduate School of Arts and Sciences, and FAS) plus twelve school deans.

⁴ "Administrative Deans" include executive deputy dean, deputy deans, senior associate deans, associate deans, assistant deans, and residential college deans.

	2014-2015 (July 1, 2014)								
Total Women % Minorities									
Officers	9	5	56%	1	11%				
School Deans	15	4	27%	1	7%				
College Masters	12	6	50%	2	17%				

Senior Advisory Groups

We continue to maintain our diversity progress in the current make up of our board of trustees (the Yale Corporation). The Yale Corporation remains unchanged and consists of five women (31%) and three minorities (19%). We have made great strides in the President's Council on International Affairs with 32% women and 27% minorities. Also, of 35 University Council members, fifteen (43%) are women and eight (23%) are minorities.

Faculty

Yale has worked, over a sustained period of time, on ways of increasing the diversity of its faculty. This ambition is rooted in Yale's collective notion that diversity makes us a stronger, more excellent institution. This ambition also dovetails with the ideals outlined in President Salovey's public comments about increasing access to higher education as a way of addressing the economic disparity in our society and preserving the American Dream.

Between 2009 and 2010, Yale felt the impact of the global financial crisis. As a result, and because of the ensuing decline in hiring (except in the Medical School), the university was able to meet some but not all of its 2005 goals. Changes in total, women, and minority ladder faculty are shown in the following table for the Faculty of Arts and Sciences (by division), for the Medical School, for other professional schools, and for the total university.

			Fact	ilty Hea	adcount	by Gender	r and R	ace				
]	FALL 2	2008	•		•		FALI	2013			
	All	Won	ıen	Minorities			All	Women		Minorities		
	Ν	Ν	%	Ν	%		Ν	Ν	%	Ν	%	
FAS						FAS						
Humanitie	5					Humanitie	s					
Tenured	156	44	28.2%	16	10.3%	Tenured	170	55	32.4%	22	12.9%	
Term	88	47	53.4%	17	19.3%	Term	74	37	50.0%	11	14.9%	
Social Scie	ences					Social Sc	iences					
Tenured	102	21	20.6%	17	16.7%	Tenured	105	28	26.7%	19	18.1%	
Term	68	27	39.7%	21	30.9%	Term	70	30	42.9%	14	20.0%	
Biological	Science	S				Biological Sciences						
Tenured	46	6	13.0%	5	10.9%	Tenured	49	9	18.4%	5	10.2%	
Term	19	6	31.6%	3	15.8%	Term	15	3	20.0%	2	13.3%	
Physical S	ciences					Physical .	Science	5				
Tenured	116	10	8.6%	12	10.3%	Tenured	135	16	11.9%	18	13.3%	
Term	69	18	26.1%	22	31.9%	Term	61	17	27.9%	17	27.9%	
Total FAS						Total FAS	S					
Tenured	420	81	19.3%	50	11.9%	Tenured	459	108	23.5%	64	13.9%	
Term	244	98	40.2%	63	25.8%	Term	220	87	39.5%	44	20.0%	
TOTAL	664	179	27.0%	113	17.0%	TOTAL	679	195	28.7%	108	15.9%	

Medical School						Medical School					
Tenured	396	78	19.7%	50	12.6%	Tenured	486	107	22.0%	64	13.2%
Term	725	305	42.1%	188	25.9%	Term	932	411	44.1%	252	27.0%
TOTAL	1121	383	34.2%	238	21.2%	TOTAL	1418	518	36.5%	316	22.3%
MED						MED					
	6.0.1					0/1 D	60.1				
Other Pro	f School	S				Other Pro	of Scho	ols			
Tenured	143	43	30.1%	19	13.3%	Tenured	141	47	33.3%	18	12.8%
Term	77	40	51.9%	17	22.1%	Term	76	35	46.1%	17	22.4%
TOTAL	220	83	37.7%	36	16.4%	TOTAL	217	82	37.8%	35	16.1%
PROF						PROF					
	•.						• .				
Total Univ	versity					Total Uni	versity				
Tenured	959	202	21.1%	119	12.4%	Tenured	1086	262	24.1%	146	13.4%
Term	1046	443	42.4%	268	25.6%	Term	1228	533	43.4%	313	25.5%
TOTAL	2005	645	32.2%	387	19.3%	TOTAL	2314	795	34.4%	459	19.8%
UNIV						UNIV					

Total University Faculty Changes – Fall 2008 to Fall 2013. The above table shows changes in women, minorities, and all faculty between fall 2008 and fall 2013 for FAS and the twelve professional schools. The total faculty body grew by 15.4% from 2,005 in fall 2008 to 2,314 in fall 2013 with the greatest growth in the School of Medicine (+26.5%). Total tenured women rose from 202 to 262 and tenured minorities rose from 119 to 146. Total term women rose from 443 to 533 and the term minorities rose from 268 to 313.

FAS Faculty Changes – Fall 2008 to Fall 2013. FAS faculty grew 2.3% from 664 to 679 with an increase) for women from 179 to 195 and a decrease from 113 to 108 for minority faculty. FAS tenured women grew from 78 to 107 and tenured minorities rose from 50 to 64. The overall decrease in the number of FAS term faculty led to a decrease in the percentage of FAS term faculty who were women by 98 to 87 and a decrease in term minorities by from 63 to 44. Although the overall FAS picture for both women and minority faculty is rising, these increases are in tenured positions. Across the four divisions, a picture of percentage increases in women and minorities for tenure positions and decreases for term positions holds except that the social and physical sciences have seen a slight increase in term women faculty.

History of Efforts to Increase Faculty Diversity. From 2006 to 2013, Yale pursued a Faculty Diversity Initiative that specifically focused on increasing the number of women in the sciences and the number of underrepresented minority faculty overall. The initiative, as described above, met with partial success.

In February of 2014, a distinguished visiting team from academic institutions and philanthropic organizations around the country convened in New Haven at the invitation of Provost Benjamin Polak and Deputy Provost Julia Adams. Under the auspices of a Faculty Diversity Summit, this group was asked to take a candid look at Yale's efforts to diversify its faculty; to hear from deans, department chairs, and faculty representatives; and to offer suggestions for ways that Yale might continue to make progress.

The Summit provided all with a clearer sense of the challenges at Yale, a renewed energy and commitment to nurturing, mentoring, and recruiting a more diverse faculty, and a deep appreciation for the idea that diversity is a driver of excellence throughout the university. The team provided a formal report to the President and Provost, whose recommendations are in the course of being implemented.

The Diversity Summit is one of many in a long line of efforts to improve diversity at Yale. Yale has been committed to increasing the diversity of its faculty in all parts of the institution, recognizing the scholarly and intellectual importance of diversity to its core teaching and research missions. This commitment has developed and expanded over time. This long-standing commitment can best be appreciated by a review of Yale's specific efforts:

1984 Yale sets the goal of doubling the number of tenured women in the Faculty of Arts and Sciences. (This goal was achieved within six years.)

1999 University President Richard Levin urges the faculty to search as broadly as possible, affirming that financial resources will not be a barrier to recruiting a more diverse faculty to the university.

2001 Yale joins eight other top research universities for a meeting at MIT with an unprecedented dialogue on equitable treatment of women faculty in science and engineering. Following that meeting, the group – now known as the MIT-9 – released a statement agreeing to analyze the salaries and university resources provided to women faculty, work toward a faculty that reflects the general diversity of the student body, and reconvene to share strategies.

2004 The total ladder faculty in the 2004-2005 academic years was 10 percent greater than five years prior. Meanwhile the number of minority faculty in the Faculty of Arts and Sciences increased by 30 percent and the number of women faculty increased by 43 percent overall and 113 percent in the sciences.

2005 President Richard Levin and Provost Andrew Hamilton issued a memo to the Faculty of Arts and Sciences reaffirming the 1999 commitment that resources would not be an impediment to hiring an appropriately diverse faculty. Their articulated goals were: (1) substantially increasing the hiring of minority faculty, adding at least thirty minority scholars over seven years; (2) increasing the number of women faculty in fields in which they were underrepresented by adding thirty new women faculty; (3) increasing the diversity of future faculty members in Ph.D. and postdoctoral training ranks.

To accomplish these goals, several new strategies were to be implemented, including the institution of a Yale Committee on Faculty Diversity, careful oversight of the appointment and promotion processes including the appointment of a "diversity representative" to each faculty search committee, targeted hiring opportunities to allow departments to reach out to outstanding women and minority scholars, expansion of efforts at the graduate school in the identification and recruitment of diverse candidates for Yale's PhD programs, recruitment of diverse candidates for post-doctoral fellowships, increased mentoring of faculty within departments, and an examination of existing policies and procedures that support individuals in balancing the demands of work and personal life.

Since 2010, the following steps have been taken:

- Then-Provost Peter Salovey appointed a University Faculty Diversity Council (UFDC) in academic years 2011-2012 and 2012-2013 to renew Yale's post-financial-crisis faculty diversity strategy.
- In 2013, the Faculty Diversity Hiring Committee (FDHC) was appointed, putting into place the first significant revision of the 2005 diversity training program. The FDHC seeks to share information with departmental search committees about the diversity of their respective departments, to situate that conversation in peer department data, and to help search committees increase the pool of individuals recruited for openings.

- Yale enhanced its commitment to childcare support, especially for women in science. In particular, money was raised (i.e., the Ann Coffin Hansen Fund) to subsidize childcare for women faculty with infants. Yale also significantly subsidized the creation of a new childcare facility, The Nest, on central campus.
- The Provost's Office (Office of Faculty Development) piloted an interdepartmental mentoring program, which paired junior faculty members with senior faculty in related, though different, disciplines, in order to help junior faculty with some of their non-discipline specific questions.
- The Office of Faculty Development initiated a program to bring in outside mentors to provide additional feedback for and support to junior faculty
- The Provost's Office expanded its new chairs' orientation programming to include a discussion about mentoring and climate. (Chairs both experienced and new have also been instrumental in providing their suggestions for the Diversity Summit.)
- The Office of Faculty Development successfully applied for a grant from NSF's ADVANCE program. The NSF grant will enable us to launch a program that provides mentoring to women postdocs in the sciences. The Debra Fine Postdoctoral Fund was created; it has advanced the careers of postdoctoral scholars in general and women in science in particular.
- The Yale University Postdoctoral Mentoring Prize was created. The prize recognizes the Yale faculty member who is judged to best exemplify the role of a mentor to her or his postdoctoral trainees. Nominations for this award are solicited from all postdoctoral fellows and postdoctoral associates at Yale.

Area 5. Assessment

Responses to this area are incorporated in the Assessment, Retention, and Student Success essay (Standard 2.6).

Area 6. Implementing CYCE Recommendations

Responses to this area are incorporated in the update for Standard 4 (The Academic Program) and in the Assessment, Retention, and Student Success essay (Standards 2.4, 4.9).

STANDARDS: CHANGES SINCE 2009 AND FUTURE PROJECTIONS

Standard 1 - Mission and Purposes

Submitted by:

Penelope Laurans, Special Assistant to the President; Master, Jonathan Edwards College; Lecturer, English

Peter Salovey, President; Professor of Psychology, Epidemiology, School of Management, and Sociology

There is nothing in the mission statements presented in Yale's 2009 Reaccreditation that the passage of five years makes inaccurate. Nevertheless, the passage of time, as well as recent changes in Yale's leadership, suggest that this is an appropriate moment to reconsider the mission statements. The new administration inevitably will have a new perspective on Yale's current mission and statements about it. These are unlikely entirely to supplant the old, but may add to them, or differ in emphasis from them.

In his inaugural address, President Salovey reaffirmed Yale's long held aspiration to be "a research university that proudly and unapologetically focuses on our students." He recommitted the college to need-based and need-blind admissions and asked that there be increased emphasis on access for low-income students. He underlined that we must increase the size of our undergraduate student body in order to better fulfill our contribution to society. He proposed that the university be proactive in investigating and using new technologies imaginatively and responsibly to meet the revolution in methods of teaching and learning. He asked that the university do more to nurture student entrepreneurs who might contribute to our local economy and that members of all departments and schools increasingly explore innovative ways to use Yale's scholarly and research strengths to make a difference around the world.

In her turn, Mary Miller's term as dean of Yale College saw a tremendous increase in the academic and social needs of students in Yale College. Dean Miller led a faculty review of the curriculum launched in 2005 and brought amplification to curricular offerings through programs such as the Global Health Fellows and Education Studies. During her term there were significant efforts to improve the campus climate, including establishing the position of communications and consent educators and creating a position for an assistant dean with responsibility for addressing the prevention of sexual misconduct. Although none of what has taken place upends what has been important to Yale's missions in the university and college, a different emphasis in certain areas nevertheless may augment and develop important aspects of it. Some tweaking or reformulation of the mission statements to take this into account therefore may be in order.

The president has discussed the University mission with the Cabinet (which includes the senior leadership of the University – deans, provost, vice presidents, and others) and the Corporation. There continues to be strong commitment to the particular mission of Yale as a leading research university that places great emphasis on teaching and learning, and the importance of undergraduate education. There is also an emerging view that the current University mission, as stated, does not adequately capture the emerging aspirations of Yale. The president plans to revisit the University mission statement with the Cabinet, the Corporation, and others before the next reaccreditation process begins.

Standard 2 – Planning and Evaluation

Submitted by: Lloyd Suttle, Deputy Provost for Academic Resources

Since assuming their positions in 2013, President Peter Salovey and Provost Ben Polak have introduced a number of changes in Yale's planning, evaluation, and communication structures and procedures. Many of these changes have responded directly to issues raised in our 2009 report. Some of the reforms also address new challenges that have arisen during the last five years or that are anticipated to emerge in the next five years.

University Cabinet

President Salovey meets regularly with the senior officers and the senior academic leaders of the university – the deans of all of the schools and the university librarian – to share information directly about issues of university-wide importance and to seek their input on major decisions.

Long-term Financial Planning

The challenge of achieving a sustainable long-range financial plan became a major priority for the leadership of the university as a result of the economic downturn in 2008. In 2010, former President Levin outlined for the Corporation a series of studies aimed at finding more sustainable approaches to supporting the university's activities at the highest level of quality. Those studies, and the actions that resulted from them, were organized around four priorities: (1) sustaining faculty excellence and productivity, (2) supporting students, (3) optimizing administrative support, and (4) utilizing facilities more efficiently.

Soon after his appointment, Provost Polak provided an update on the outlook for the university budget ("better than it has been, but we still have work to do") and described key principles and processes that will guide the choices that must be made over the next few years. The first principle is a commitment to the university's core mission – teaching and research. The second principle is transparency and broad understanding of the budget planning process, as well as active involvement of faculty and staff in that process. He also announced that he planned to schedule meetings with faculties of schools and departments from all across the university, to seek their help in "the chore of educating a new provost." Those meetings and that learning process continue today.

Long-term Capital Plan

During his first few months in office, Provost Polak undertook a careful review of the university's longrange capital plan. In late September 2013, he proposed a long-range capital plan to the Corporation that reflects President Salovey's vision for the university by focusing on a relatively small number of highpriority projects – the renovation and expansion of Hendrie Hall (School of Music and Yale College music programs), the renovation and expansion of the Sterling Chemistry Lab, the two new residential colleges, a new Yale science building, a major renovation of the Hall of Graduate Studies, new housing for graduate and professional students, a new theater for the Drama School, and a new research building at the School of Medicine. In early October, he sent another memo to the Yale community providing an update and seeking feedback on these and other projects.

Academic Review

Anticipating the construction of two new residential colleges and the expansion of the undergraduate student body by 800 students (15%), and enabled by the extraordinary growth in the endowment. Yale began to expand the size of the Faculty of Arts and Sciences in 2005. Between fall 2005 and fall 2010, the number of ladder-track faculty grew by 64 (10%), while the number of authorized faculty positions increased by 87 (12%). With the economic downturn in 2008-09, the university realized that it did not have the resources to support a faculty as large as the total number of authorized slots, and so the Faculty of Arts and Sciences Steering Committee began to restrict the number of authorized searches to fill vacant positions. As a result, departments found their ability to plan strategically for the renewal of their faculty and to develop multi-year plans for conducting faculty searches to be highly constrained. In the spring of 2011, then-Provost Salovey appointed an Ad Hoc Committee on Faculty Resources and Budgeting for the Faculty of Arts and Sciences, chaired by William Nordhaus, Sterling Professor of Economics and a former provost, to review the allocation of faculty resources in the Faculty of Arts and Sciences. In February 2012, the Committee issued a report that contained nine recommendations designed to reduce the number of authorized positions to a sustainable level (eliminating what is called the "slot overhang") and return control of faculty searches to the departments. That report was endorsed by the FAS faculty and approved by the provost later in the spring of 2012.

In August 2012, Provost Salovey announced appointment of the Academic Review Committee (ARC), chaired by Steven Berry, Professor of Economics and Director of the Division of the Social Sciences. The ARC was charged to review the allocation of faculty positions across the divisions and departments of the Faculty of Arts and Sciences, and to make recommendations for how positions should be allocated to ensure the healthy evolution of the core mission of FAS. The ARC met regularly in 2012-13 and 2013-14 and consulted extensively with the Divisional Advisory Committees, the chairs of departments, and individual faculty. The following recommendations were presented to the provost and the Faculty of Arts and Sciences in spring 2014:

- 1. A new FAS Faculty Resource Committee (FRC), guided by the divisional committees, will make final decisions on search requests. The committee will consist of four experienced faculty members, the Divisional Directors, the FAS deans, and the Provost; it will be chaired by the FAS Dean. The committee will base its decisions on a range of considerations, including academic excellence and opportunities, needs for quality teaching and mentoring, and success in meeting departmental goals.
- 2. Departments and other academic units will once again manage their own department slots under appropriate traditional guidance. The FRC should approve high-quality search requests on department slots. However, to achieve an appropriate slot vacancy level, the FRC may have to delay some search requests to a subsequent year.
- 3. The FRC will manage a new pool of common faculty slots (Faculty Resource Pool), strategically deploying half-slots to meet FAS faculty priorities.
- 4. The ARC currently recommends a target rate of flow into the pool equal to one half of the expected rate of senior faculty departures, which average about one percent of total FAS senior slots per year. Over a decade this implies a target contribution, for each department, of seven percent of total department slots. All these slots are to be reallocated back to FAS academic units. Ordinarily, departments will retain the slots under junior departures from department slots, as well as from failed searches on department slots.
- 5. The ARC recognizes that academic excellence requires faculty diversity. Therefore, the FAS Faculty Resource Pool will provide a significant number of half-slot resources for this purpose.

- 6. Search requests from academic units are always evaluated with respect to bedrock principles of academic excellence. Search requests from academic units that are systematically failing to meet benchmarks on important goals such as faulty diversity, undergraduate and graduate needs for classes, and high-quality teaching aqnd mentoring will face particular scrutiny.
- 7. The ARC also recognizes the important role of junior faculty at the university, as well as the budgetary consequences of senior hiring. The ARC recommends senior/junior hiring guidelines with built-in flexibility, similar to those recommended by the Nordhaus Committee.
- 8. Moving forward, any new additions to the FAS faculty slot list should be fully budgeted and should be vetted for their academic contributions to the FAS by the divisional committees and the FAS Faculty Resource Committee.
- 9. Any larger changes in the allocation of FAS faculty resources should take place in the context of a reinvigorated process of ongoing academic reviews.

The recommendations were approved by the Provost following a full discussion at a meeting of the entire FAS faculty on May 8, 2014. They will be implemented by the Provost and Dean of the Faculty of Arts and Sciences beginning in 2014-15.

New Residential Colleges

In June 2008, then-President Levin announced the decision to move forward with the expansion of Yale College through the creation of two new residential colleges and an increase in the size of the undergraduate student body by around 800 students. Those plans were put on hold later that year as a result of the economic downturn, though fundraising continued and gifts raised in those years allowed the architectural planning and design work to continue, along with site preparation and certain "enabling projects" that created alternative spaces for units located in buildings on the site of the new colleges.

In September 2013, President Salovey announced that Charles B. Johnson '54 had pledged \$250 million to support the construction of the new colleges. He also announced the appointment of an Ad Hoc Committee on Yale College Expansion, co-chaired by Provost Benjamin Polak and Yale College Dean Mary Miller, to review planning for the new colleges. The committee was charged to focus on teaching, learning and student services and what Yale must do to accommodate a student body increased by 15%.

The ad hoc committee met regularly during 2013-2014, and formed working groups to focus on four key areas: teaching fellows and non-ladder teaching; classrooms, scheduling and laboratories; seminars and advising; and the Yale College experience. Members of the committee consulted with faculty and students both informally and through a series of open sessions held in January and February. Preliminary findings were presented for feedback at the Yale College Faculty Meeting on March 6. Provost Polak and Dean Miller shared the ad hoc committee's final report with the Yale College faculty, students, and staff in Yale College on May 12, 2014. The findings and recommendations of the report are summarized below.

Teaching Fellows and Non-Ladder Teaching. Considering the case of larger courses reliant on teaching fellows for section teaching, the committee was mindful of the fact that the size of the Graduate School is not (and should not be) tied to teaching needs; that is, we will not fill the increased demand for sections simply by adding more graduate teaching fellows. Instead, the committee recommends, again, that more flexibility be accorded with respect to section sizes, and that the use of non-traditional approaches to section instruction — e.g., professional students as teaching fellows, undergraduate peer tutors, and preceptors to oversee and teach gateway courses — be further developed and made more institutional.

Classrooms, Scheduling, and Laboratories. The committee considered classroom availability and capacity plus transparency into the availability of teaching spaces to be of paramount importance. Review showed that the large majority of courses will have capacity to enroll 15 percent more students in their existing locations with no changes made. In a few instances additional resources would be beneficial: for example, an additional TEAL class room or a larger computer lab for computer science; also, for a small number of large courses (e.g., introductory psychology, economics, and biology), a 15 percent increase would push the course enrollment over the maximum capacity of Yale's largest classrooms. The committee recommended that departments be encouraged to consider a variety of options for addressing these situations, e.g., offering the same course twice in a given semester, moving the largest courses into early morning time slots, or devising means of dividing large courses into smaller ones that are more manageable in spaces already existing on campus. For the long term health of the curriculum and of the students, the committee recommended that the current schedule structure be thoroughly and carefully reviewed and that measures be taken to shift course offerings to earlier in the day and more broadly across the teaching week with the majority of courses, if not all, fitted into standard time slots.

The Yale College Experience. The subcommittee emphasized that a smooth opening of the new colleges would require careful attention to the identification and transition planning of their leadership (masters and deans), fellows, staffing, and initial population of students. They paid particular attention to extracurricular programs in the arts, to athletics, student organizations, cultural centers, and programs managed through the Center for International and Professional Experience (CIPE), including career services —and the spaces these programs inhabit or deploy for their purposes. The following areas merit continued attention and further study: (1) increased demand for certain types of fellowship funding, especially summer science and engineering research opportunities, (2) renovation of Hendrie Hall – a building with rehearsal spaces for solo practice and lessons and ensembles – as well as new rehearsal spaces in the two new colleges, (3) demand for indoor and outdoor athletic facilities, and (4) pressure for meeting spaces for tutoring, collaborative study, and organizations.

Additional Budget Analysis. The committee determined early in its proceedings that a subset of the projected budgetary implications of the expansion should be investigated outside the scope of the committee itself. The Provost's Office is undertaking an analysis of key areas not covered by the committee or its subgroups, including university services (e.g., transit) and academic support (e.g., library fees).

On June 3, 2014 President Salovey announced that with full funding Yale now is ready to proceed with the new colleges. Salovey noted that in order for Yale College to stay true to its mission to remain accessible for deserving students, added living and learning spaces would be key:

"Our college is among the smallest of our peer schools, and I believe we must expand access to undergraduate education by building two new residential colleges. Adding more space for qualified students was a leading factor in the Yale Corporation's decision to build the new colleges. Yale College now admits less than 10 percent of applicants; as recently as 1999, that rate stood at over 20 percent. And for fall 2013, the 1,359 students in the Class of 2017 came from an applicant pool of 29,610—the largest in Yale's history. Initially, faculty, staff, student, and alumni committees reviewed the potential impact of additional students, producing the 2008 *Report of the Study to Consider New Residential Colleges.*"

Construction of the two new colleges is expected to begin early in 2015, and the first group of students will move in in August 2017.

Governance of the Faculty of Arts and Sciences

In May 2013, President-elect Salovey and Provost Polak announced the formation of an ad hoc committee to look at faculty input in the Faculty of Arts and Sciences. The committee was chaired by Steven Wilkinson, Professor of Political Science, and consisted of six tenured faculty members, two from each of the divisions of the Faculty of Arts and Sciences (Humanities, Social Sciences, and Science and Engineering). This group was convened with the goals of better understanding the mechanisms in place for faculty input at other institutions and considering the possible approaches that could be effective at Yale. Members of the Faculty of Arts and Sciences were encouraged to share their feedback with members of the committee, either directly or through the use of an online form.

In October 2013, the Committee offered a preliminary report that contained two primary recommendations:

- That the Faculty of Arts and Sciences establish an elected senate.
- That a committee appointed by the president be charged with crafting a detailed plan for the structure, staffing, and rules of the new senate.

President Salovey and Provost Polak convened a special meeting of the FAS ladder faculty in December, 2013, at which the faculty voted to approve the recommendations. President Salovey accepted these recommendations and solicited nominations for the new committee the following day. In February 2014, President Salovey announced to members of the Faculty of Arts and Sciences that he appointed an ad hoc committee for the FAS senate planning, chaired by Professor Wilkinson. He asked the committee to prepare a plan for the structure, staffing, and rules of the Yale FAS faculty senate and to present its report for a vote by the FAS faculty no later than December 2014.

Standard 3 – Organization and Governance

Submitted by: Kimberly Goff-Crews, Secretary and Vice President for Student Life Margaret Ryan McDonnell, Associate Secretary & Director of Corporation Affairs

The Yale Corporation, the institution's governing body, is composed of nineteen members who are entrusted through the Charter of 1701 and the Bylaws with the authority to exercise the responsibilities of governance required in NEASC Standard 3. Although the formal governance structure of the university remains unchanged, the bylaws have been amended in the years since the 2009 assessment to reflect developments in the administration of the university; none of the changes or amendments were undertaken or required to satisfy this standard. The following are additional developments since the last reaccreditation that have had an impact on governance processes and procedures.

Changes in Institutional Governance

Trustee Retirement Age. In February 2012, the Yale Corporation approved a proposal by its Trusteeship Committee to raise the mandatory trustee retirement age from 70 to 72. This amendment brings the university in line with the practices at our peer institutions and the top Fortune 500 companies, and allows the Corporation to benefit from the expertise of a wider array of individuals.

New Officers of the University. The 2009 Self Study acknowledged the expansion in financial and administrative activities, which had prompted creation of the position of vice president for human

resources and administration. Michael A. Peel was named to this position in October, 2008. With the revised financial and administrative structure in effect since 2010, attention has shifted focus to development of the university's international outreach efforts and expansion of digital projects and initiatives. The position of vice president for global strategies was created to guide the ongoing work in these areas. This vice president is Linda Koch Lorimer, the former secretary and vice president of the university and a long standing member of the senior administration.

University leadership has also dedicated itself to strengthening the campus culture. In 2011, the position of university secretary was expanded to include the role of vice president for student life. University Bylaws already dictated that the Secretary of the university is responsible for major student-related issues; the role now includes oversight and strategic direction of student life concerns and responsibility for strengthening connections between students and administrators in Yale College, the Graduate School, and in each of the professional schools to ensure clear and consistent communication of university values. Kimberly Goff-Crews became Secretary and vice president for student life in August 2012.

Deliberative Bodies

As noted in the 2009 reaccreditation report, formal governance mechanisms, ad hoc committees, and informal communication channels exist to address issues of consequence to the university. In addition, President Salovey has formed two new advisory bodies in an effort to increase transparency and give senior administrators an active role in the governance of the university. The Vice Presidents' Council consists of all the vice presidents of the university and meets once a week with the president. The University Cabinet includes the deans of Yale College, the Graduate School and all of the professional schools, the members of the Vice Presidents' Council and the University Librarian. The Cabinet meets once a month to discuss issues of consequence to the university.

Development of Yale-NUS College

The development of Yale-NUS College, the first liberal arts college in Singapore, marks a major shift in the university's approach to overseas endeavors. Yale-NUS College is not a branch campus but rather a fully autonomous school of the National University of Singapore (NUS) that originated from a partnership between Yale and NUS.

Initial exploration for the project began in 2009 with the establishment of three faculty committees. At every stage of this process, the university engaged community members, seeking feedback from students, faculty, and alumni through open meetings, public communications, and focus groups. Although the establishment of the Yale-NUS College did not require changes to the Bylaws or the university governance structure, the president of Yale does serve alongside the president of NUS as a member of the board of Yale-NUS College. The Corporation is entitled to nominate half of the members of the Yale-NUS Governing Board. The presidents of Yale and NUS are ex officio members, and there are ten other members, half nominated by Yale and half by Singapore. All of the nominees are officially approved by the Ministry of Education in Singapore.

The degrees granted by the college, which opened in September 2013, are awarded by the National University of Singapore. Since Yale is not involved in the awarding of degrees, this report does not describe how the programs and practices at Yale-NUS College meet NEASC's Standards for Accreditation.

Standard 4 – The Academic Program

Submitted by:

Susan Cahan, Associate Dean for the Arts, Yale College; Lecturer, Art

Alfred Guy, Assistant Dean, Yale College; Director; Yale College Writing Center; Lecturer, English

Joseph W. Gordon, Deputy Dean, Yale College; Lecturer, English

Pamela Schirmeister, Pamela Schirmeister, Senior Associate Dean of the Graduate School and Dean of Strategic Initiatives in the Graduate School, Yale College, and the FAS; Lecturer, English

William Segraves, Associate Dean for Science Education, Yale College; Lecturer, Molecular, Cellular, and Developmental Biology

Nelleke Van Deusen-Scholl, Associate Dean, Director, Center for Language Study; Professor Adjunct, Linguistics

Yale College

The 2009 self-study, comprehensive report, and response from CIHE all noted that the academic program for undergraduates would be strengthened by addressing the continued challenges and opportunities raised by the Committee on Yale College Education (CYCE) in its 2003 report. In 2011, over a dozen committees of Yale College faculty, students, and administrators evaluated the curricular and programmatic changes implemented starting in the fall of 2005 that pertained to the Class of 2009 and beyond. The reports of these committees revealed that Yale had made major strides toward meeting most of the goals of the CYCE but also highlighted new and lasting challenges. In this update, we summarize the key programmatic and curricular changes that have taken place since 2009 and identify strategies developed to understand what students are learning and how the evidence that is obtained is used to oversee and improve the academic program. We also describe Yale College definitions of course credits, credit hours, and credit transfer policy.

Writing Requirement and the Yale College Writing Center

Since 2008, more than twenty new writing courses have been developed in the Sciences and Social Sciences, including large and popular courses in Economics and Physics. There are now approximately 200 more seats in courses outside the Humanities designated "WR" (meaning that they may count toward the requirement of two WR courses before senior year). But enrollments in Humanities WR courses are still three times greater than enrollments in Science and Social Science WR courses combined. The Humanities have a deeper tradition of the small seminars that serve as the best setting for writing courses (in fact, small seminars provide 70% of the WR enrollments).

The Yale College Writing Center provides tutoring for student writers in all courses and coordinates the writing requirement. The Writing Center directors also hold individual consultations with fifteen to twenty new WR teachers (both faculty and graduate student teaching fellows) every year, and reach another one hundred through group presentations. Writing Center staff have more direct influence on the pedagogy of WR lecture courses, which provide the other 30% of enrollments, because all TFs in these courses attend a six-week seminar in teaching writing. The WR lecture program reached 1,350 students in 2013-2014, vs 900 in 2008-2009.

Most Writing Center tutoring is available to all students on a first-come, first-served basis. The 5-7% of Yale students who can be classified as ESL or bilingual writers have consistently used about 20% of this time. Since 2008, we have provided additional tutoring available only to ESL writers. Demand for this service has grown tremendously, as its sterling reputation spreads (more than 95% of students rate the

program as highly effective). In 2010-11, we served forty ESL writers this way, for approximately 400 hours of tutoring; 2011-2012, sixty-five students and 800 hours; 2012-2013, seventy students and 900 hours; 2013-2014, ninety students and a projected 1,200 hours.

Science

Since 2009, increased admission and retention of prospective STEM majors has led to more than a 20% increase in overall STEM enrollments and more than a 40% increase in STEM majors. In support of STEM learning, Yale College has sustained its one-on-one science and quantitative reasoning tutoring at nearly three times the 2004-2005 level at the same time that a pilot peer tutoring program that embeds tutors in key introductory level courses has expanded from seven courses in 2009-2010 to 35 courses in 2012-2013. A new program for enhancement of mathematics preparation was launched in summer 2013.

Introductory science, mathematics, and engineering courses have undergone substantial curricular and pedagogical changes. New chemistry, mathematics, and physics courses draw strong connections between each of those fields and the biological sciences. Introductory courses in biology, mathematics, and physics have been restructured to incorporate a wide range of active learning approaches. Laboratory courses in the sciences are incorporating expanded opportunities for original scientific discovery. The new Center for Engineering Innovation and Design offers a hands-on introduction to Engineering at Yale and a venue in which students from all disciplines can turn ideas into working objects and devices. A new freshman summer research fellowship has increased by over 50% the number of opportunities for Yale College students to engage in research during the summer after the freshman year, and launched us toward achievement of our goal of making the opportunity to engage with original research by the sophomore year available to all Yale College students.

Each of these initiatives is being evaluated and shaped by assessment. Enunciation of learning goals is now a standardized part of the approval process for new quantitative reasoning courses. The introductory courses are incorporating tests of student learning through pre- and post-testing, comparison to previous or parallel course offerings, or other criteria. As new courses and pedagogies are being introduced, student progress in subsequent courses and in majors is being analyzed. Discussions are under way about the establishment and implementation of additional measures to look at learning not just at the end of a given course but at graduation as well.

Foreign Languages

Language assessment has become a major area of focus for the Center for Language Study, which has devoted a number of workshops to this topic as well as two week-long intensive Instructional Innovation Workshops for Yale's language faculty. This past year, the Center hired a testing and assessment specialist who will be coordinating several new initiatives in this area. These include:

- Assisting language programs with rethinking their placement testing by creating online placement examinations and by aligning their placement tests more carefully with both their curricular objectives and the students' broader language experiences.
- Using the web-based OWL testing system for course placement and for other forms of online assessment, such as oral proficiency testing.
- Introducing electronic portfolios for undergraduate students as a way to document their language and cultural experiences over the course of their undergraduate careers at Yale. As an additional outcome of this initiative, we are now also developing teaching e-portfolios for language faculty

and for graduate students in our Second Language Acquisition Certificate program who are entering the job market.

• Starting a process of establishing competency standards specific to each language program, particularly at the elementary and intermediate levels, and articulating measurable outcomes that are in line with nationally and internationally-recognized measures of language proficiency, such as the proficiency guidelines developed by the American Council on the Teaching of Foreign Languages (ACTFL) or the Common European Framework of Reference (CEFR).

Over the past three years, Yale has entered into a collaborative agreement with Columbia and Cornell to create a shared model of instruction for the less commonly taught languages. The project uses live classroom-to-classroom videoconferencing technology and other state-of-the-art technological resources to share language instruction. The project started in 2011-2012 with just two languages but has expanded to feature approximately 20 languages in the 2014-2015 academic year.

Humanities Initiative

In June 2012, the university received a three-year grant from the Mellon Foundation for a project entitled "Re-imagining the Humanities." The grant provides opportunities to re-think the undergraduate curriculum in the humanities, to prepare three cohorts of graduate students for the sort of jobs that are available in the current market, and to fund postdoctoral fellows in the humanities as they develop broader and more interdisciplinary teaching portfolios.

Additionally, the former dean of Yale College organized several workshops from which a number of new courses – which are team-taught and interdisciplinary – have evolved. Many of the graduate students participating in the program will have the opportunity to team-teach with faculty members for some of the courses. The workshops also have led faculty to design new kinds of assignments in humanities courses, to set up new pathways within majors, and to invigorate the relation of the humanities curriculum to that of the sciences.

Arts Initiative

Since 2010 Yale College has engaged in a robust process of internal and external assessment to evaluate the quality of its arts programs. Reviews of several curricular programs, extracurricular activities, and facilities concluded that Yale provides students with excellent campus resources for the study and production of art, particularly its world-class museums and collections, and that its co-curricular arts programs are outstanding. However, the reviews also pointed to issues in Yale's arts-faculty appointments structure, aging or inadequate facilities in some arts disciplines, and fragility in the infrastructures of some disciplines.

The Provost's Office is considering a report that calls for a standing body comparable to a divisional committee to advise on arts-practice programs, faculty and their promotion, and other pertinent issues. The report also calls for expanding the involvement of arts-practice faculty in college governance by, for example, including arts-practice faculty members on the Committee on Majors and the Course of Study Committee. Other recommendations include strengthening Film Studies and Theater Studies by transitioning these units from programs to departments.

Freshman Academic Affairs

One of the recommendations of the 2003 CYCE report was to make "a major effort to increase opportunities for students to study with ladder faculty in small groups in both the freshman and sophomore years." Beginning with eleven seminars in fall 2004, the Freshman Seminar program has grown to nearly fifty seminars annually. Currently, over 40% of freshmen take a freshmen seminar, in which the average enrollment is thirteen students. All freshman seminars grow out of the regular academic offerings of an existing department or program and are taught almost exclusively by ladder faculty. To date, freshman seminars have been offered in over forty different FAS departments and programs as well as most of the professional schools.

The Freshman Seminar Program builds on the successes of two long-standing special academic programs for entering students, Directed Studies and Perspectives on Science, which annually enroll 125 and 60 freshmen, respectively. In addition, a large number of small, discussion-based courses in writing and literature are offered primarily for freshmen through the English department. All told, then, around 90% of freshmen take at least one limited-enrollment, seminar-style course. If other small courses, such as introductory foreign languages and mathematics are included, nearly 95% of freshmen currently take at least one such course.

Assessment of freshman seminars occurs as part of the regular self-reviews for all departmental and program majors that are carried out both in external reviews of departments and the departments' own reviews of their instruction.

Freshman Advising

Since 2009, Yale College has sought to improve pre-major academic advising including an enhanced program of meetings with faculty advisers working with freshman, sophomore, and "at-risk" students. Starting in fall 2013, a new half-time position of director of freshman and sophomore advisors was added to the Yale College Dean's Office. With a staff member able to concentrate on these issues, the YCDO offered two new orientations for advisers (which happened to attract a significant number of returning advisers); two meetings with advisers of students "at risk"; and one mid-term advising refresher meeting. The director of advising also reached out to constituent units on campus in fall 2013 in order to facilitate information sharing and program coordination.

Fall 2013 also saw the launch of a new web site for sophomores with updated information for both students and advisers, and a regularly updated, customizable calendar; a similar site for freshmen will launch in spring 2014. The sophomore web site received over 2,500 visits between October 2013 and December 2013. A regular stream of communication with students and advisers has consisted of monthly email blasts about deadlines, procedures, and (for advisers) approaches to advising, as well as a periodic "Advising Matters" e-newsletter.

New Special Academic Programs for Upperclassmen

To enrich the curricular opportunities available to students, the faculty authorized in May 2013 a framework for creating special academic programs in Yale College. Each program approved under this arrangement will enable a cohort of selected undergraduates to pursue a field or discipline not already covered by an existing major. These programs are distinct from majors in that they do not purport to provide the same depth of concentration nor do they offer a capstone experience; they also are distinct from minors, in that they are not reduced versions of existing majors. Many of these special academic

programs culminate in a workshop course that requires students to use cross-disciplinary methods and materials to focus on finding solutions to problems of interest. Some emphasize the development of skills that complement or extend the skills students acquire in their major or through distributional requirements. Education Studies, Energy Studies, Global Health, and Journalism are among current special academic programs offered in Yale College.

In accordance with the plan presented to the faculty, no more than five such new programs are to be created in the five-year period beginning July 1, 2013, after which a comprehensive review of the value and the costs of such programs should be presented to the Yale College faculty.

Yale College Course Credits, Credit Hours, and Credit Transfer Policy

Both in 2004 and in 2011, Yale College and the Yale Graduate School of Arts and Sciences reviewed our definitions of course credits and credit hours. In 2011 we participated in a NEASC-led conference call with over 100 New England institutions of higher education to discuss federal regulations and planning for NEASC definitions. Within Yale, we considered how our undergraduate course credit definition met the needs of Financial Aid, the Immigration and Naturalization Service, the National Collegiate Athletic Association, and the Veteran's Benefits Administration. We also compared our policies to that of peer institutions in the region.

Yale College Course Credits. In Yale College, the vast majority of courses are internally each worth one course credit. Some are worth more (e.g., two credits for intensive language or research courses or one and a half credits for most introductory language term courses), some less (e.g., half a credit for many laboratory courses). A student in Yale College normally takes four or five term courses in a semester, or their equivalent, for each of eight terms; thirty-six course credits are required to graduate with a bachelor's degree. A minimum term load is three course credits. A three-course-credit program or a six-course-credit program of study requires permission of a student's residential college dean. A student must petition the Yale College Committee on Honors and Academic Standing for permission to take a program worth seven credits in a term.

Yale College Credit Hours. During the implementation of our current student database (Banner), the decision was made that Yale College should have a standard conversion formula to provide clear guidance to external constituencies about how Yale College course credits convert to semester credit hours. Since the use of semester hours appears to be the predominant method of attaching numerical value to courses, it was felt that we should be prepared to enunciate a standard course credit-to-semester credit hour conversion formula. The decision was then made that the Registrar's Office would respond officially to inquiries from outside officials and institutions that one Yale College course credit equates to *either 3 or 4* semester hours. And, we understood, that each typical one semester credit hour also includes approximately two out-of-class hours.

Credit Transfer Policy. A student may not employ course credits earned at another college or university to reduce the expected number of terms of enrollment in Yale College. A student may apply as many as two course credits earned at another college or university toward the 36-course-credit requirement for graduation from Yale College. Before undertaking such outside study, the student should consult the residential college dean about both the institution to be attended and the course to be taken there. Courses in Yale Summer Session and at the Paul Mellon Centre in London are not considered outside courses, and there is no limit on the number of such courses that a student may offer toward the requirements of the bachelor's degree. Students who wish to receive credit for summer study abroad with outside programs must apply for approval through the Summer Abroad program.

Yale Graduate School of Arts and Sciences

Improving Graduate Education

Since the last accreditation, the Graduate School initiated an extensive review of the Ph.D. programs ("Improving Graduate Education") that both measured the degree of program success across various dimensions and created a uniformly accepted set of best practices that would improve outcomes. Specifically, the project correlated seven programmatic practices to student success, with particular attention to increasing the quantity and improving the quality of advising and mentoring. A student survey in 2012 followed up to help the Graduate School determine which programs were progressing toward implementation and which programs would benefit from further examination and consultation.

Graduate Students Teaching Experience

Since 2009, the Graduate School has continued to look at the quality of the graduate student teaching experience. In consultation with graduate programs, the school has created new types of teaching experiences, particularly those that provide a measure of independent teaching in an apprentice-like situation. We are also in the process now of reviewing the types and structures of appointments already in place in the hope of creating more consistent appointments across the programs. One possible outcome of this review, financial considerations pending, is to provide graduate students a guaranteed sixth year of funding through teaching fellowships.

Collaboration across Programs

The Graduate School has also made progress in creating more collaborative opportunities and connectivity amongst programs. In collaboration with Yale College, the Graduate School received a Mellon grant to improve humanities education at the undergraduate, graduate, and postdoctoral levels. At the graduate level, we have been able to bring students from multiple humanities disciplines together for a year-long, interdisciplinary seminar, coupled with funding for students to take additional courses outside of their home departments. This cohort will continue to work together in various ways until it graduates, and it will be followed by at least two further groups of students. Next year, we plan to offer competitive places to students across the disciplines within each division to participate in interdisciplinary dissertation writing workshops. This represents a departure from our current model that brings together students at the dissertation level into homogeneous groups.

Improving Mentoring

The Graduate School has completed a three-year project to assess mentoring practices across graduate programs in the arts and sciences. In the first phase, programs compared themselves to other graduate programs at Yale across many dimensions of student outcomes. The second phase involved a student satisfaction survey, and following the analysis of the results, each department was asked to discuss among themselves and with the students how they would address areas of student concern. Nearly every department has completed this task.

Standard 5 – Faculty

Submitted by:

Julia Potter Adams, Former Deputy Provost for the Social Sciences; Professor, Sociology and International & Area Studies

James J. Antony, Associate Provost; Professor Adjunct, School of Management

Yale remains committed to developing its faculty in ways that fulfill the institution's mission. The university's combined faculties include approximately 3,600 members, divided among the Faculty of Arts and Sciences (FAS, which serves both Yale College and the Graduate School of Arts and Sciences) and twelve professional schools. Each of these faculties includes tenured faculty, non-tenured ladder faculty, and non-ladder faculty such as lecturers, lectors, and research scientists. The ranks, standards, regulations, benefits, and procedures of FAS faculty provide the model for most of the other faculty, with the Faculty Handbook spelling out relevant differences. The FAS faculty has grown only slightly over the last decade, and less dramatically than the professional school faculty.

FAS faculty are organized into four areas: Humanities, Social Sciences, Physical Sciences and Engineering, and Biological Sciences. The new position of dean of FAS consolidates many of the faculty-centric responsibilities previously divided among the dean of Yale College, the dean of the Graduate School of Arts and Sciences, and the provost. The number of FAS faculty is quite large relative to the number of students in Yale College and the Graduate School. There are approximately 700 ladder and 300 non-ladder faculty in the FAS, and approximately 5500 undergraduates and 2900 graduate students in Yale College and the Graduate School of Arts and Sciences respectively. Course loads differ by discipline, but all Yale ladder faculty teach, and virtually all FAS ladder faculty teach undergraduates. Excusing faculty from undergraduate teaching responsibilities has never been used as a tool in recruiting or retention. Faculty who are recruited to Yale understand and for the most part appreciate the university's commitment to undergraduate instruction.

Faculty also play an important role in student advising and are engaged in the management of the institution. Faculty responsibilities and policies are described in the Faculty Handbook. Although there are differences in the precise nature of these expectations across departments and areas, it is widely recognized that members of the FAS faculty at all ranks are highly productive researchers and scholars.

Faculty Governance

During 2012-14, a provostially-appointed Academic Review Committee (ARC) chaired by a faculty member and including among its members the deans of Yale College, the Graduate School, the chairs of the Divisional Committees, and a number of other faculty from across the FAS, undertook a careful evaluation of the allocation of faculty "slots" across FAS departments. The goal of the committee was to "establish a new and better system by which to build and renew an outstanding faculty, flexibly determine academic priorities, and adjust to emerging opportunities." The result of the committee's deliberations was the establishment of a Faculty Resource Committee (FRC), consisting of lay faculty and faculty administrators, which will have final authority over the distribution of positions across departments and the authorization of searches within the FAS. Faculty slots within departments are designated as either "Departmental" slots (with the assumption that the all or part of the resource underpinning the position will return to a common pool upon vacancy). Resources within the common pool will be deployed strategically across departments to support FAS and university priorities including opportunities to diversify the faculty, spousal initiatives, areas of intense teaching need, interdisciplinary

academic activity and targets of opportunity. Non-ladder faculty appointments are now overseen by an analogous committee, the Teaching and Research Advisory Committee (TRAC), composed of representatives from the offices of the deans of FAS, Yale College and the Graduate School.

Each FAS department and most FAS programs are assigned to one of four areas: Humanities, Social Sciences, Biological Sciences, and Physical Sciences and Engineering. Each area has a chair appointed by the President who serves as chair of one of four area advisory committees. The members of the area committees, also appointed by the President, are full professors from the FAS drawn from the departments in that area. (The Biological Sciences committee also includes faculty from the Yale School of Medicine.) These committees have two related functions. They meet regularly with chairs of departments and programs or among themselves in order to provide advice to the FAS deans, the Steering Committee of the Faculty of Arts and Sciences, and the Faculty Resource Committee about the quality and effectiveness, as well as the appointments needs, of the departments and programs in their division. They also meet, in this case chaired by the Dean of the FAS and including a representative from a department outside the area, to act as the Tenure Appointments and Promotions Committee for their area. The tenure and promotion process is governed by the recommendations of the 2007 Faculty of Arts and Sciences Tenure and Appointments Policy Committee (FASTAP) report. In 2014-15, the FAS expects to undertake a review of the academic governance structures of the FAS, including the area committee structure, and the FASTAP promotion process.

Questions concerning FAS faculty policy and its implementation are addressed at weekly meetings of the FAS Steering Committee. The FAS Steering Committee is chaired by the dean of the FAS, and includes the dean of Yale College, the dean of the Graduate School, the dean of the School of Engineering & Applied Science, the dean of Faculty Affairs of the FAS, the dean of Academic Affairs of the FAS, the associate deans of the FAS, and advisory representatives from the Office of the Provost. Members of the FAS Dean's office meet periodically with the chair of each department to discuss both routine implementation of departmental business and the department's strategic planning for the future.

An additional change on the horizon, the result of recommendations of a presidentially-named faculty committee on governance, is the creation of a duly-elected faculty-senate-like structure in the Faculty of Arts and Sciences. A faculty committee has been charged with developing a formal proposal to the FAS faculty regarding the scope of responsibilities that will be associated with this FAS faculty advisory senate.

Together, the changes being pursued by the faculty and leadership at Yale are profound. From the reexamination of the ways in which Yale defines and allocates faculty slots, to the reorganization of the leadership structure in order to clarify roles and responsibilities relative to the leadership of the FAS, to the creation of a new body intended to gather the input and involvement of the faculty in FAS, Yale is not standing still with respect to its faculty.

Standard 6 – Students

Submitted by:

Lisa Catherine Olga Brandes, Assistant Dean, Graduate School of Arts & Sciences; Director, Office of Graduate Student Life, McDougal Center

W. Marichal Gentry, Senior Associate Dean, Dean of Student Affairs, Dean of Freshman Affairs, Yale College

Pamela Schirmeister, Pamela Schirmeister, Senior Associate Dean of the Graduate School and Dean of Strategic Initiatives in the Graduate School, Yale College, and the FAS; Lecturer, English

The 2009 self-study detailed the diversity of resources and services that Yale provides to ensure the success of its students. This fifth-year report provides updates on four areas the institution has prioritized in order to continue fostering students' intellectual and personal development:

- Building community
- Transitions into and out of Yale and New Haven
- Supporting and enhancing diversity
- Online technology for student services

Building Community in Residential and Nonresidential Settings

Housing. In 2012, renovation of all twelve existing residential colleges was completed. In the winter of 2014-2015, construction of the two new residential colleges is scheduled to begin, with completion planned for 2017. As noted elsewhere, in 2013 the university leadership began a comprehensive look at graduate-professional student housing, on- and off-campus.

Academic and Student Services Spaces. New homes for the School of Nursing on West Campus (2013) and School of Management in Evans Hall on Whitney Avenue (2014) provide extensive new classroom and co-curricular spaces for their communities. Connecting the growing West Campus graduate-professional student and post-doc population to central campus student activities, facilities, and services continues to be a concern for Graduate and Professional (G&P) students and administrators alike. In 2013, the university opened the new Native American Cultural Center. Renovation of the Hall of Graduate Studies, a large historic building currently housing the Graduate School, the McDougal Graduate Student Center, academic departments, and a graduate dormitory, is scheduled to begin soon and to be completed by 2019.

Campus-wide Student Activities and Performance Spaces. The completed residential college renovations have provided some new spaces for performances and meetings open to parts of the student body. In recent years, some additional arts and music spaces have been renovated or improved, or renovations are planned (Hendrie Hall), but campus performance space is still at a premium. Non-classroom space for large events, meetings, or conferences is still scarce, and where it exists, has high and sometimes competing demands. With growing use and popularity among the G&P population, the McDougal Center and the Graduate & Professional Students Center at Yale (GPSCY) have received modest enhancements in recent years, but both await future comprehensive renovations to add air-conditioning and/or disability access. The possibility of creating a large, multi-purpose campus-wide student center if and when it might be financially feasible is once again a topic of conversation among Yale College and G &P student government leaders.

Wellness. Yale continues to expand its wellness programs and services for students. The new Yale Health Center, opened in 2010, provides state-of-the-art comprehensive health and mental health care and coordination. Yale Health has a new professional health educator for Student Wellness, providing programs, education, and outreach to the entire student body, and enhancing training and oversight for the undergraduate Peer Health Educators and Graduate Wellness Ambassadors. In the past two years, the university has strengthened campus-wide policies on sexual misconduct and is continuing to study and refine its alcohol policies. The Yale College Office of Gender and Campus Culture and AOD Harm Reduction Initiative and the existing university-wide SHARE Center (Sexual Harassment and Assault Response & Education) received new spaces, staff, and programming support to enhance their missions. This past year, both the undergraduate and G&P student governments have released reports studying campus mental health calling for changes to services, and prompting high-level discussion and immediate action where possible.

Transitions Into and Out of Yale and New Haven

Orientation & First-Year Program. Recent years have seen extensive enhancements to the Yale College orientation programs for new students, including a high-profile keynote speaker bringing the entire freshman class together. The Graduate School annually revises its comprehensive orientation program, most recently to provide a small-group professional ethics workshop for all new students. Students in the twelve G&P schools receive varied pre-arrival information and orientation programs, but some coordination of information and social events across the G&P schools and student governments has been initiated in recent years. In 2013, Yale College began Freshman Scholars at Yale, a summer bridge program for thirty-three students with limited previous exposure to postsecondary resources and opportunities (see page XX for information about ongoing assessment of this program), and in 2012 the Graduate School started its three-week pre-orientation English Program Summer Academic Language Program in New Haven for approximately forty first-year Ph.D. students who need to enhance their English speaking and cultural skills.

International Study & Research. In Yale College the Center for International and Professional Experience has greatly expanded its services, and the Yale Visiting International Scholars Program now brings twenty-five students from five global partner institutions to campus for the academic year. An international experience now is part of the School of Management's full-time MBA curriculum, and other graduate and professional schools have increasingly internationalized their student bodies, curricula and non-academic offerings. The creation of the comprehensive online Yale International Toolkit makes accessible standardized information, registration, and emergency assistance for all students, faculty, and groups.

Pre-Professional & Career Services. Since the 2009 report, the professional schools of Architecture, Music, Nursing, and the Jackson Institute (Global Affairs MA in GSAS) have established career services professionals and/or programs. The Postdoctoral Office, which serves 1,400 postdoctoral fellows and associates on campus, recently hired a full-time staff member for career services, providing specialized new postdoc programs and augmenting those of the newly reorganized Office of Career Strategy. Campus career offices also are partnering on online services for dossier credentials, and for online systems posting job notices from recruiters seeking to hire Yale students at various levels.

Supporting and Enhancing Diversity. The expanding notions of diversity at all levels have greatly enhanced the intercultural dialogue and events on campus. The Yale College Intercultural Affairs Council organizes and promotes events that bring the community together for dialogue and cultural awareness. Under President Levin, the university standardized coordination and funding for the Martin Luther King

campus events each January. The director and fellows of the Graduate Office for Diversity and Equal Opportunity continue to expand programs to support the recruitment, retention, and support of a diverse graduate community. The Resource Office on Disabilities, which serves the entire university, added a new staff member to accommodate the growing population and needs on campus.

Web-based Student Affairs Services and Technology. Yale has made some progress on web-based student services technology in recent years, with a new ITS-supported Yale campus events calendar, based on the open-source Bedeworks system. Many Yale units and schools now have integrated responsive web calendars, including the popular new Yale Arts Calendar. Student leaders in Yale College and the G&P Schools are increasingly asking the university for more responsive, centralized 24/7 online services for student group registration, calendaring, and funding, campus room booking, course information, and web ticketing. In some cases, the students themselves have implemented short-term solutions. Currently, under the auspices of the Vice President for Student Life, major campus stakeholders are investigating online systems from third-party vendors to provide comprehensive web-based student affairs services. As the university proceeds with its proposed development of a new web-based HR & financial management system in partnership with WorkDay, some changes to the systems for student billing, payment, and records, course selection, course registration, and course management are expected in coming years, but the implications as yet are unclear.

Standard 7 – Library and Other Information Resources

Submitted by: Susan Gibbons, University Librarian Leonard Peters, Chief Information Officer Susan West, Associate Director, Information Technology Services

Library

Over the last five years, Yale has enhanced its teaching and learning environment by supporting its library facilities, expanding access to collections, and improving outreach to faculty and students. These efforts have been guided by the clear vision that immersion in the Library's collections and engagement with our staff and services are transformative in the intellectual and academic development of Yale's students.

Enhanced Library Facilities. Although the 2009 self-study report noted the Library's intention to move some operations to West Campus, in 2012 the decision was made to invest instead in a renovation of staff areas in Sterling Memorial Library. This renovation was completed in April 2013. The international reading rooms in Sterling tower have been improved. In addition, Sterling is in the midst of a \$20 million renovation of the building's gothic nave. The scope of the project includes a full restoration of the stained glass windows and wood millwork, cleaning of all of the stone and ceiling/wall paintings, and modernization of the heating, air conditioning, sound, and lighting systems. Moreover, the restoration includes improvements and rationalization of service points, the security desks, and access to collections and reading rooms. The project is on schedule to be completed in September 2014.

Significant improvements have been made to the security and environmental conditions of the Medical Historical Library, the Divinity Library and the Historical Sound Recordings collection, which brings these collections up to industry-established preservation and security standards. In January 2012, a new Center for Science & Social Science Information (CSSSI) was opened in Kline Biology Tower, replacing the Social Science Library, Science Library, and the Mudd Library. In its first eighteen months, CSSSI

had nearly 234,000 visitors, far exceeding the library visits of the three former libraries in any given eighteen-month period.

Expanded Collection Access. Key elements in the Library's strategy to improve the discoverability of collections include improving the cataloging of published materials and enhancing the descriptions of our manuscript and archival collections. For example, the closure of the Mudd Library provided the unprecedented opportunity to review, enhance and, in many cases, newly create cataloging records for the nearly two million items in the Mudd Library. Cataloging projects have also targeted materials in less-common languages, for example non-Spanish Iberian languages and languages from Africa and Southeast Asia. These collections are now fully represented in the library catalog and, as a result, the use of them has greatly increased.

Discovery of archival and manuscript collections has increased with targeted projects focused on archival collections. In addition, the Beinecke Rare Book & Manuscript Library is a year away from completing a four-year project to baseline process all of its archival collections.

To complement the improved discovery of collections, the Library has focused on improving collection access and delivery. In September 2012, a new "Scan & Deliver" service was launched, offering two-day delivery of PDF scans from the Library's general print and microform collections. The Yale community quickly adopted the new service with much acclaim, and nearly 19,000 Scan & Deliver requests were received in the first academic year. In September 2013, the Library launched an "electronic reserves" program so that course reserve materials are easily accessible and integrated into Yale's course management system.

Staff Resources and Academic Support Services. As scholarly communication and research increasingly include digital content, the Library has expanded staff expertise. A sampling of the new positions within the Library includes: digital archivist, digital preservation manager, data librarians (2), digital humanities librarian, digital reformatting librarian, and an arts-area digital librarian. In addition, the technology staff has grown significantly since 2009 to oversee the Library's growing technology infrastructure and digital storage. The Library has also redefined the role of subject librarians, with a considerable emphasis on personal outreach to undergraduates, graduate students, and faculty.

Future Agenda. In May 2015, the Beinecke Rare Book & Manuscript Library will begin a sixteen-month, comprehensive renovation of the 1963 iconic Gordon Bunshaft building. Amongst the programmatic improvements planned are two additional teaching classrooms and additional consultation rooms. In order to avoid the closing of the Beinecke collection while the building is closed during the renovation, a temporary reading room and special collections classroom will be established in the Sterling Memorial Library. Several of the Beinecke's administrative departments will be permanently moved into a building on 344 Winchester where they will eventually be joined by the department of preservation and conservation.

Information Resources

Yale College faculty members make increasingly diverse and powerful use of technology in teaching and learning. Leading adopters are exploring multimedia resources, social networking tools, mash-up tools, and simulations. The growth of these new technologies has been met by developments in innovative academic technology solutions including commodity services such as collaboration and file sharing platforms, private cloud virtual machines, network bandwidth, and spam filtering.

Specialized services delivered by Yale's Information Technology Services (ITS) or collaboratively with other campus units have increased throughout the university. For example, in the last year, ITS unveiled a Technology-Enabled-Active-Learning (TEAL) classroom. TEAL activities along with online learning programs have brought significant faculty interest for "flipped classroom" models that are being supported by ITS. The flipped model supports major curriculum shifts in the School of Medicine toward learning analytics and in the School of Management, which opened its new building with active-learning classrooms in January 2014. ITS has also completed teaching and learning projects ranging from an online Doctor of Nursing Practice program for mid-career nurses, to designing and supporting the use of iPads in biology.

Network Infrastructure. High-performance computing (HPC), data intensive computing, and data management have been growing exponentially in support of both teaching and research. The university continues to invest in these areas to meet growing research needs. In fiscal year 2014, the university committed \$1.5 million for an HPC cluster, deployed a science network for high-speed access to Internet2, and HPC resources using a National Science Foundation award, and funded three incremental support positions in the area of data lifecycle management. Similar support and an earlier National Institutes of Health award developed HPC for the life sciences. Also within the past year, both HPC and research services have created – in partnership with researchers, faculty, and strategic committees – new visions and strategic plans that are well on the way to delivery.

Online Learning. Yale has also taken significant strides in online learning. Building upon the success of Open Yale Courses, the university currently offers Massively Open Online Courses (MOOCs) through Coursera. Other online offerings include online certificate programs in forestry and environmental studies, many special purpose online courses with partners in medicine, management, and languages, and Yale College courses for credit during the summer in highly-interactive online formats.

Assessments of the Yale College online courses have been conducted from both the faculty members' and the students' perspectives. All faculty members surveyed reported that their online course was worthy of Yale credit. The 2013 survey results added to these insights. All of the faculty responding thought their online students had as much or more) contact time with the course as a comparable course in residence, and all thought their students acquired at least an equivalent amount of course content. The students' surveys showed that 97.5% thought that the online environment allowed them to analyze and think as critically about course content as a traditional Yale course.

Future Agenda.

• Support for teaching, learning, and research technologies

- The need for additional resources to support growing requests was met by an increase in funding for staff resources. Yale has performed extensive talent searches for leadership for the new Academic IT Solutions (AITS, formed in 2012) and Research Technologies teams, and will increase staff positions by a total of fourteen over the next two years.
- *Enhancement of web services as part of a newly-defined web strategy* ITS will significantly increase web services available to faculty, staff, and students, create easyto-use web templates on multiple platforms, and focus on strategy for providing information for and about Yale's extensive network.
- **Replacement of Yale's human resources and financial database system** The university's needs for a replacement Enterprise Resource Planning (ERP) platform has required funding and focus as it provides the foundation for the network of human resource management, identity and access management, and financial planning and budgeting. The cloudbased system Yale has chosen will alleviate maintenance customization and upkeep, as well as
expensive upgrades. Over the next several years, administrative units on campus will collaborate on this extensive project.

• Improvements in academic administrative systems

Over several years the existing complex academic administration systems managing student and advising information have caused headaches for faculty and administrators. ITS will continue to work closely with the university Registrar's Office and Yale College Dean's Office to determine efficient and cost-effective solutions to improve the management of student financial, information, and course-related data.

Standard 8 – Physical and Technological Resources

Submitted by: Elizabeth J. Anderson, Manager, Space Management & Information Systems Stephen Brown, Associate Director, University Planning Virginia Chapman, Director, Office of Sustainability John R. Meeske, Former Associate Dean for Student Organizations & Physical Resources, Yale College

Capital Projects and Funding

During the last five years, Yale has spent \$1.85 billion to enhance its physical and technological resources in ways that support institutional priorities. The university has completed over 560,000 GSF of new construction and additions; comprehensively renovated 675,000 GSF; and completed numerous smaller renovation, repair, and infrastructure projects. The expenditures came from a combination of gifts; grant funds; operating funds; and the Capital Replacement Charge Fund, which received continued investment during this period.

The economic downturn and resulting reduction in the value of Yale's endowment caused the institution to prioritize the capital projects based on the availability of capital funds and projected operating funds. Initially, capital projects already underway or donor-funded were completed. These included construction of Rosenkranz Hall and renovation of 493 College Street (both academic buildings); construction of the Yale Health Center & Garage, the Greenberg Conference Center, and three new modules of the off-site Library Shelving Facility; the renovation and addition to Ingalls Rink; the Kenney Center addition at the Yale Bowl; the new Reese Stadium for soccer and lacrosse; and renovation of the remaining portion of the Yale University Art Gallery and Street Hall – was completed as well. The new, donor-funded, School of Management campus, Edward P. Evans Hall (an additional 344,000 GSF), was under construction and addition to Hendrie Hall will begin in late 2014. Several other construction and comprehensive renovation projects remain on hold until additional gifts or capital funds become available.

Assessment of physical resources is guided by campus development goals that ensure equality of the undergraduate experience, and support the missions of teaching and learning. During this period, comprehensive renovations and additions have been completed for three residential colleges (Calhoun College, Morse College, and Ezra Stiles College). Enabling projects for the two new residential colleges were also completed while fund-raising continued. Construction is scheduled to begin on these two new residential colleges (528,000 GSF) in early 2015. A graduate dorm, Helen Hadley Hall, was refurbished; and a donor-funded renovation of the New Residence Hall will be completed in the future for Law School students.

Some larger science projects were re-designed or phased, to allow them to move forward at a reduced cost. These include the Kline/Sterling Chemistry Lab project, which now includes a comprehensive renovation of the Kline Chemistry building, to be completed in 2014; and future, phased renovations of Sterling Chemistry Lab. The School of Engineering and Applied Science had space renovated for the Center for Design and Innovation; as well as research expansion space in the former, renovated Health Services building. Full floor and lab suite renovations funded by research grants continued to take place at both the Medical and the Central science areas of the campus.

Teaching spaces have been added in new buildings and renovated space, including: nine new classrooms/computer labs in Rosenkranz Hall, a TEAL classroom and five computer labs and classrooms in the renovated former Health Services building, classrooms in the newly renovated Yale University Art Gallery/Street Hall, four renovated seminar rooms in 493 College, six classrooms and a teaching lab suite in the space renovated for the School of Nursing at the West Campus, and sixteen new case-study classrooms and a large lecture hall in Edward P. Evans Hall. The lecture halls and classrooms in the science buildings on the Central campus were also renovated, and many classrooms across the campus have received technology upgrades during this period.

Utilities and Energy Savings

Utilities projects have moved forward as well, including construction of a new Co-Generation Plant at the Medical School, a new chiller plant for the central campus, and an addition to the Central Power Plant. Plans for a re-powering of the Central Campus Power Plant are also moving ahead. Through conservation and efficiency, the campus has reduced its energy consumption by approximately 1% despite nearly 5% growth, resulting in annual energy cost savings.

Sustainability

Over the past five years university-wide sustainability efforts have been guided by strategic planning documents, designed to look comprehensively across divisions and involve all of the Yale community to create the infrastructure and behaviors that support the institution's goals. Yale's first Sustainability Strategic Plan was launched in 2010 with an ambitious set of goals intended to expand upon the university's greenhouse gas emissions targets established in 2005. With growing support and commitment from almost every sector of the campus, we have made significant progress over the past three years in advancing sustainability. Major accomplishments achieved through the first plan include:

- 16% reduction in campus greenhouse gas emissions
- 24% reduction in municipal solid waste
- 28% recycling rate
- 95% of dining hall food waste composted
- 37% of dining hall food meeting one of the four sustainable food criteria
- 100% of new on-campus construction and major renovations earning at least Leadership in Energy & Environmental Design (LEED) Gold certification

In addition to the quantitative goals, we have developed and begun implementing the following sustainability management plans:

- Green Purchasing Guidelines
- Stormwater Management Plan (2013–2016)
- Water Management Plan (2013–2016)
- Sustainability Supplement to the Framework for Campus Planning
- A Plan for Sustainable Transportation at Yale

Standard 9 – Financial Resources

Submitted by: Robert J. Herr, Associate Controller Stephen Murphy, Associate Vice President & University Controller

In the years since the 2009 comprehensive report, Yale University has continued to present a substantial financial position, strong student demand, competitive research programs, growing clinical activities, and a generous alumni base. Revenues have been steadily growing over the last five years, with all operating revenues devoted to academic purposes and programs. By June 2009, after the financial crisis, the university's net assets dropped from \$22.3 billion to \$17.4 billion. Since that time net assets have grown to \$22.5 billion, a 29% increase. (See response to "Financial Resources" area in the areas for special emphasis part of this report (pp. 4-6) for a more detailed review of Yale's plans to manage financial resources.)

Accounting and Fiscal Control

The Yale Corporation Audit Committee ensures the independence and performance of university internal and external auditors and also reviews whether corrective action is necessary when deficiencies are identified. The university financial statements are audited annually by an independent public accounting firm (currently PricewaterhouseCoopers, LLP). The auditors test internal controls of the university, track university compliance with generally accepted accounting principles, and report on internal controls over financial reporting and compliance with federal regulations. The auditors have consistently issued an unqualified opinion on university financial statements and the management letter has not identified any significant control deficiencies. In addition, the university has consistently received the highest credit ratings from Moody's Investors Services and Standard and Poor's during the period under review.

Current Enterprise Architecture

The YaleNext administrative improvement program initiated in fiscal 2008 was completed during fiscal 2011. The program began with a comprehensive assessment of business practices and delivered improvements in human resources including implementation of electronic time tracking for employees, an Employee Service Center to field and address HR related issues for employees, outsourcing the management of employee benefits to Aon Hewitt and self-service access to pay and benefit information. Improvements were implemented in the research enterprise, including electronic conflict of interest (COI) completion and tracking, and electronic pre-award proposal development and tracking.

In the summer of 2013, Yale launched a multi-year project to replace the systems that support the university's core human resources, payroll, and financial functions. This project will incrementally migrate functions supported on Oracle's Enterprise Business Suite (EBS) platform to Workday's cloud-based software as a service platform. This transition will help Yale meet the strategic objectives of simplifying and standardizing business processes, making it easier to get work done and establish a more trusted reporting environment, minimize administrative overhead for faculty and administrate staff, and lower operating costs.

Investments

From June 2009 to June 2013 the Yale Endowment posted an annualized investment return of 11.8% and released over \$4.1 billion to the university's operating budget. At June 30, 2013 the value of Yale's Endowment stood at \$20.8 billion.

Fundraising Environment

Fundraising activities for the university are led by Vice President for Development Joan O'Neill, who succeeded Inge Reichenbach as vice president in July 2012.

Despite the challenges of an unsettled national and even global economy over the past five years, the university has continued to realize great success in its fundraising efforts. The major university-wide fundraising campaign that began in July 2004 and was publicly launched in October 2006, "Yale Tomorrow," ended in June 2011 having raised a total of \$3.88 billion in commitments and outright gifts, surpassing the goal of \$3.5 billion which had been increased from \$3.0 billion in June 2008. In the last year of the Yale Tomorrow campaign, fiscal year 2011, the university had its best year ever both in terms of assets received (\$585 million) and outright gifts and commitments (\$862 million). The campaign focused on fundraising for the arts, the sciences, and international initiatives with the addition after June 2008 of fundraising for the two new residential colleges authorized by the Yale Corporation.

In fall 2013 the university announced the receipt of its largest gift - \$250 million to help fund the construction of the two new residential colleges. On June 3, 2014 President Salovey announced, "I am also truly delighted to report one exceptional update from the two weekends of reunions: we have now raised sufficient funds to move forward with the process of building the two new residential colleges, and we now can 'bid out' the construction project. If we receive satisfactory proposals, we can begin construction this winter." In total the university has received just over \$2.35 billion during the last five fiscal years, ending in June 2013.

Patient Care Revenues

Through the Yale School of Medicine (YSM), the university is a leader in advanced clinical care and is the region's largest specialty health care provider. Between fiscal 2009 and 2013 clinical revenues at YSM grew at a compound annual growth rate of 10.2% from a total of \$408 million to \$602 million. This extraordinary growth was fueled in part by the strengthening partnership with YSM's primary affiliated hospital, Yale-New Haven Hospital (YNHH). In collaboration with YNHH, outstanding clinical faculty have been recruited and clinical programs have been enhanced in cancer, therapeutic radiology, transplantation, cardiovascular medicine, urology, surgery, neurology, neurosurgery, gynecology, ophthalmology, and orthopedics.

In addition, new departments have been formed in emergency medicine and urology, both of which are evolving into leading programs. Outstanding programs in dermatology, internal medicine, laboratory medicine, obstetrics and gynecology, psychiatry, and therapeutic radiology have continued to recruit and improve.

Research

Over the last five years, the average annual increase in sponsored-agreement income was 1.46%, from \$507 million to \$630.6 million, excluding funding provided under the American Recovery and Reinvestment Act (ARRA). Yale researchers competed very successfully for ARRA funding and \$155.6 million was awarded and spent during this period. However, given the effects of the economic downturn, the university has sought to broaden the sources of research funding. Federal funding continues to represent approximately 78% of total funding while non-federal funding has increased from 13.5% of the total to 17.2%. Yale has received extraordinary research awards from corporate and foundation sponsors

including \$40 million over four years from the Gilead Corporation focused on cancer drug development, \$15 million from AbbVie Corp. to study autoimmunity and inflammatory diseases, and \$10 million from the Blavatnik Foundation to study inflammation.

Yale faculty have been recognized for their contributions to research. In 2009 Professor Thomas Steitz was awarded the Nobel Prize in Chemistry. In 2011 Professor Arthur Horwich was awarded the Lasker Prize in Basic Medical Research. In 2013 Professor James Rothman was awarded the Nobel Prize in Physiology or Medicine and Professor Robert Shiller was awarded the Nobel Prize in Economic Sciences. Also in 2013, Professor Richard Lifton was selected as one of the inaugural honorees of the Breakthrough Prize in Life Sciences. Additional Yale faculty have won numerous other prestigious awards recognizing their important contribution to their respective fields.

Standard 10 – Public Disclosure

Submitted By: Russell Adair, Acting Director, Institutional Research Thomas Conroy, University Press Secretary Nandi Cummings, Sr. Administrative Assistant, Office of Federal Relations Richard J. Jacob, Associate Vice President, Federal & State Relations

Yale remains committed to the timely and complete dissemination of information to members of the university community as well as prospective students. It has taken advantage of digital technology to move almost exclusively to online publication of essential information and policies. This shift has occurred at the same time as recognition by the university of the importance of communicating in a coordinated and systematic way to the Yale community. (Pages A27-A28 in the Appendices list urls.)

The university continues to engage the Yale community in discussions of importance before the institution. A prime example, which may involve substantive matter outside of the scope of issues normally considered in accreditation, is Yale's forthright discussion of efforts to revise campus climate around sexual misconduct.

The course catalogs – the bulletins for Yale College, the Graduate School, and each of the professional schools – serve as the definitive manuals of academic policies, course offerings, and degree requirements. The schools of Yale now rely on online dissemination of the course catalogues. Yale seeks to establish multiple routes to accessing the bulletins. For example, the Yale College Programs of Study can be reached directly from the web site of Yale College (http://yalecollege.yale.edu/) or (http://www.yale.edu/printer/bulletin/index.html), the Yale Bulletins page. The Yale College Admissions web site includes a link to the web site of Yale College, from which the Yale College Programs of Study can be reached.

The bulletins are universally available online as PDFs, but some of the catalogues are also available in an html format that users may find easier to navigate because individual sections can be opened separately. The Yale College Programs of Study (http://catalog.yale.edu/ycps/) is the model for the html version of the catalogues. Other catalogues, such as the *Programs and Policies* of the Graduate School of Arts and Sciences is currently available only as a PDF, but Yale intends to install an html-based format of *Programs and Policies*.

Comprehensive online information about Yale course offerings is available through the Online Course Information site; in 2012 Yale adopted a more user-friendly online course search and registration

application, the "Yale Blue Book." The site can be reached from the Online Course Information site or directly at https://ybb.yale.edu/. The Yale Blue Book site also can be reached from the web site of the Yale College Council, the elected student government. The Yale College admissions web site provides a direct link to the Online Course Information site (and, in turn, the Yale Blue Book).

Yale strives to be open about the cost of attending Yale, especially in Yale College. A Google search for "Yale College Tuition" led to the following FAQ for the Yale Admissions Office:

"The total Cost of Attendance for attending Yale in 2012-2013 is \$58,600, which includes tuition (\$42,300), room (\$7,150), board (\$5,850), and books and personal expenses (\$3,300). Total cost of attendance (not only tuition) is used to calculate a student's need-based financial aid award. Yale meets 100% of demonstrated need. In recent years, the average Yale Scholarship (a need-based grant) has been \$35,500 for students on financial aid and roughly 57% of Yale students receive need-based financial aid. Read more about Yale's generous financial aid policies and use the Net Price Calculator to see how much need-based financial aid your family may qualify for. Please note, Yale does not require students to take out loans for their education." [http://admissions.yale.edu/faq/what-current-tuition-yale]

The cited passage refers to Yale's Net Price Calculator, which can be reached from the Admissions web site and of course the Yale Financial Aid site (http://www.yale.edu/sfas/finaid/).

Yale has posted the "Yale College by the Numbers" fact sheet (see Appendix X for a copy), which includes basic contextual data about the total university with emphasis on Yale College including the cost of attending the college, the level of student satisfaction, and activities after graduation, among other information. The university is aware of the prevailing winds in current policy debate, which call for greater transparency on the part of colleges and universities. It is the university's hope that "Yale College by the Numbers" will inform the decisions of prospective students and their families and perhaps even advance the debate by offering an alternative to the metrics that the federal government has proposed for rating colleges and universities.

In 2009, the university noted the efforts of the Yale School of Medicine to develop a database of faculty research interests, biographical information, and other data that support faculty profiles in a common format across departments in the School of Medicine. The common format helps outside parties to navigate and interpret the faculty profiles. Of course a major goal in creating the database and profiles was to support Yale's internal management. The database is now at capacity and the School of Medicine is currently upgrading the database and web site. There continues to be interest in applying this model to other schools within Yale, but the different needs among schools (e.g., the School of Medicine database does not include teaching load) are obstacles to broader use of this model.

Also, the Office of International Affairs maintains a database of Yale faculty involved in international research and collaboration projects entitled "Yale and the World" <world.yale.edu/academics-research/faculty-research>.

Standard 11 – Integrity

Submitted by: Caroline Hendel, Senior Associate General Counsel Mark Schenker, Senior Associate Dean, Yale College; Dean of Academic Affairs

Over the past five years, Yale has continued to advance the message that ethical behavior is expected of all those in the university community. The most notable recent positions, programming, and processes in the area of integrity have focused on rigorous efforts to address sexual misconduct, to respond to academic integrity issues, and to promote international compliance. Over the next five years, this work will be strengthened by a commitment to the four goals President Salovey established in his inaugural address: a more unified, a more accessible, a more innovative, and a more excellent Yale.

Several new positions and appointments highlight the emphasis on integrity and compliance. In 2012, President Levin announced the appointment of Kimberly Goff-Crews to the newly-created role of secretary and vice president for student life, the first time the university has had an officer-level position devoted to student life. This position allows for coordination of student life issues across the schools of the university. In the fall of 2011, Dr. Stephanie Spangler, deputy provost for health affairs and academic integrity, was appointed as the university's Title IX coordinator, with responsibility for leading the university's Title IX programs and compliance efforts, including improving campus climate and culture with respect to gender, ensuring that complaints of sexual misconduct are timely and appropriately investigated and responded to, and tracking, analyzing, and monitoring Title IX issues.

In 2013, Jason Killheffer was appointed to the newly created role of director of academic integrity programs. In this capacity, Mr. Killheffer focuses his efforts on the further development of the university's Title IX and academic integrity programs. In 2011, Carolyn Marks assumed the newly created position of international operations compliance manager with responsibility for the development, implementation, monitoring, and evaluation of the university's global compliance program. In 2011, Melanie Boyd, an assistant dean of student affairs in Yale College, became the first director of the Office of Gender and Campus Culture. She and her team develop and implement prevention, risk reduction, and education strategies aimed at reducing the incidence of, and harms resulting from, sexual violence, other forms of sexual misconduct, and substance abuse.

The university has developed robust programming to continue to promote and educate students about ethical behavior. Dean Boyd and others have developed a series of training programs for undergraduates with regard to sexual misconduct. Under Dean Boyd, Yale College in 2011 created the Communication Consent Educators (CCEs) program. The CCEs are a diverse group of approximately forty undergraduates who work with Dean Boyd to foster a positive sexual climate. Some of their programming—particularly the freshman and sophomore training—focuses on preventing and responding to sexual violence, with the bulk of their efforts directed at constructive culture change, working with a range of student groups and communities to create space and structure for respectful, supportive behaviors, and to encourage and support bystander intervention.

Under the leadership of Dr. Spangler, the Title IX coordinators have met with numerous individuals and groups across the university to raise awareness about the university's resources for preventing and responding to sexual misconduct and to engage the community in identifying ways to promote a respectful campus culture. The creation of the Sexual Misconduct Response at Yale web site (http://smr.yale.edu/) allows for easier access to information about resources available for those affected by sexual misconduct. In 2009 the Graduate School revised its online training module in professional

ethics – mandatory for all first year degree students – to include not only material on academic integrity but also on the prevention of sexual misconduct.

Processes and policies continue to evolve in the areas of integrity and ethical behavior. The Office of Academic Integrity is actively engaged in maintaining policy and promoting awareness relating to ethical standards for the conduct of research and scholarship at Yale. The office supports and complements the efforts of the various schools and departments throughout the university to ensure that the community has the training, tools, and direction necessary to pursue individual and institutional academic objectives with the highest level of integrity. The office led the revision of the academic misconduct policy, and developed guidance on authorship in scholarly and scientific publications. The university has also created an institutional Committee on Conflict of Interest, charged with identifying and addressing any potential, actual, and apparent conflicts of interest resulting from relationships between the university and external entities. The cross-functional International Operations Compliance Committee helps the university meet operational challenges and compliance requirements, and provides guidance to faculty, staff, and students engaged in activities outside the United States. It has implemented an extensive web site (http://world-toolkit.yale.edu) with a robust Toolkit to provide compliance assistance for international activities.

In the research area, the university received accreditation from the Association for the Accreditation of Human Research Protection Programs (AAHRPP) (http://www.aahrpp.org) in 2010, and is currently in the last phase of completing its reaccreditation. Moreover, the university received accreditation from the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC) (http://www.aaalac.org). In response to new federal conflict of interest policies, the university's Office of Research Administration has developed a rigorous process to address potential, actual, and apparent conflicts of interest related to research involving human subjects.

With regard to grievance procedures, the university consolidated and simplified its process for the adjudication of sexual misconduct complaints by creating in 2011 the University-Wide Committee⁵ on Sexual Misconduct, designed to address allegations from any part of the university community. The committee provides an accessible, representative, and trained body to answer informal inquiries; it also fairly and expeditiously addresses formal and informal complaints of sexual misconduct. The committee consists of students, faculty, and administrative members drawn from throughout the university. See http://provost.yale.edu/uwc/procedures for University-Wide Committee policies and procedures regarding sexual misconduct complaints.

Student Complaints Policies and Procedures

In addition to the University-Wide Committee, policies and procedures for student complaints comprise three types of student complaint committees: (1) Deans' Procedures for Student Complaints related to a complainant's school, (2) the Provost's Procedure for Student Complaints related to schools and offices outside a student's school, and (3) the President's Procedure for Addressing Students' Complaints of Racial or Ethnic Harassment.

A Dean's Procedure for Student Complaints⁶ governs any case in which a student has a complaint, including but not limited to a complaint of discrimination on the basis of race, sex, color, religion, national or ethnic origin, disability or sexual orientation, against a member of the faculty or

⁶ http://www.yale.edu/equalopportunity/complaint/dean-student.html

administration of the complainant's school. Since an instructor's evaluation of the quality of a student's work is final, this procedure does not apply in any dispute about a grade assigned to a student by a member of the faculty, unless it is alleged that the determination of the grade resulted from discrimination based on race, sex, color, religion, national or ethnic origin, disability or sexual orientation. Similarly, this procedure does not apply to any matter inherent in the academic freedom of an instructor, such as, for example, in regard to the syllabus or contents of a course of instruction. It is also not a procedure that may be used when there is a complaint about the quality of a course or the quality of instruction in a course; such concerns may be addressed directly to the department in question. If a student believes that he or she has been retaliated against as a result of filing a grievance under this procedure, a separate complaint charging retaliation can be pursued by means of this procedure.

The Provost's Procedure for Student Complaints⁷ governs any case in which a student has a complaint, including but not limited to a complaint of discrimination on the basis of race, sex, color, religion, national or ethnic origin, disability or sexual orientation against a faculty member who is not a member of the faculty of the complainant's school (or, in the case of students in Yale College and the Graduate School, not a member of the Faculty of Arts and Sciences); or against an employee who is not an administrator in the student's school or who is not subject to discipline by the student's dean. Also this procedure is to be used for all complaints of discrimination on the basis of disability where structural modifications of University facilities is the remedy sought.

The President's Procedure for Addressing Students' Complaints of Racial or Ethnic Harassment⁸ is available to any student who believes that he or she has been harassed on account of race or ethnic origin by any member of the Yale community. For purposes of this procedure, racial or ethnic harassment will be considered to occur when any individual is subjected to arbitrary, capricious or discriminatory treatment on the basis of race or ethnic origin. In determining whether the alleged conduct constitutes racial or ethnic harassment, the committee will look at the totality of the circumstances, such as the nature of the incident complained of and the context in which the incident occurred. The committee's jurisdiction is limited to matters not already reviewed through other available university grievance processes.

Over the next five years, the university will continue to build upon the work described above. In addition, the university plans to update its copyright policy, specifically with respect to ownership issues as they relate to the creation of digital media.

ASSESSMENT, RETENTION, AND STUDENT SUCCESS

This essay reviews how each of the Yale academic programs (Yale College, Graduate School of Arts and Sciences, and the twelve professional schools) assess learning outcomes for their students and then how they use this information to improve their programs and the advising of students.

Yale College

Measures of Undergraduate Success

Overall, available data demonstrate Yale's success in the area of undergraduate education. Our retention and graduation rates (Form S1), goals for educational effectiveness and outcomes assessment (Form E1-

⁷ http://www.yale.edu/equalopportunity/complaint/provost-student.html

⁸ http://www.yale.edu/equalopportunity/complaint/president-student.html

A), students' post-graduate activities (Form S2), First Destination Study: Class of 2013 (Office of Career Strategy), and COFHE (Consortium on Financing Higher Education) surveys of registered students, seniors, and alumni describe very engaged and satisfied students who are highly motivated both during and after their time in Yale College.

Retention and Time to Degree. Yale College retains and graduates students at very high rates: 99% continue after freshman year for each of the past three sophomore classes. And the six-year completion rates for the cohorts entering in fall 2005-2007 range from 96% to 98% (Form S2).

Post-Graduate Activities. Post-graduate activities suggest that Yale undergraduates leave with the knowledge and abilities they need to succeed. Acceptance rates for medical school, ranging between 78% and 80% for the Classes of 2011-2013, are well above the national norm (46%). Of the 73.1% Class of 2013 respondents reporting paid employment, 57% work in one of four areas: financial services (15%), education (13%), research (12%), and computer science/technology (7%). For the Class of 2002 (11 years out), 84.4% of respondents pursued advanced degrees, including law (30.3%), doctorates (20.6%), MBA (11.3%), other master's degrees (26.3%), other (7.2%). For 2013-2014, 83 Yale College students and recent alumni have received nationally-and-internationally-competitive fellowships, including: Beinecke (1), Fulbright (13), Gates Cambridge (2), Goldwater (4), Hertz (1), Keasbey (1), Luce (1), Marshall (4), NIH (3), NSF (21), and Rhodes (3) scholarships.

Satisfaction. Yale College also follows trends in students' satisfaction. More than 90% of Yale alumni reported being "very satisfied" or "generally satisfied" with their undergraduate education. Most alumni (73.4%) "definitely would" encourage a high school senior today to attend Yale and 14.6% "probably would" recommend Yale, for a combined percentage of 88%⁹.

A 2013 survey of Yale College alumni who were 11, 24, 34, and 44 years out from graduation revealed that they were very satisfied with their undergraduate education from Yale and would recommend Yale to high school seniors today. Evaluations of Yale in these areas were similar to evaluations of peer institutions.

Regardless of whether they were pursuing careers related to their undergraduate major, alumni felt that the university prepared them very well for their current careers. By eleven years after graduation from Yale College, the majority of full-time employed alumni reported household earnings of at least twice the national median household income. Despite the generally high incomes reported by alumni, disparities in earning power emerged that were related to differences in the standard of living experienced by undergraduates when they entered Yale College.

Five-Year CYCE Review

The year following Yale's Ten-Year Reaccreditation Site Visit marked five years since recommendations from the Committee on Yale College Education (CYCE) report were approved by the Yale College Faculty. The CYCE was initiated by then President Richard Levin, who asked the committee to "assess the adequacy of the current undergraduate program and to consider changes and improvements." The common question directing the inquiry was: "What will an educated person need to know a decade or two

⁹ 2013 Confidential COFHE Alumni Survey, Lily Guillot, OIR 13R006, 11/13

from now, and what steps can Yale College take to ensure that students are given the best preparation for the future world?"

In 2010-2011 the college undertook a major review of progress in implementing eight CYCE recommendations. This included examination of the following CYCE areas, each reviewed by one or more committees of faculty and staff based on a variety of data about undergraduates, including transcript reviews, surveys, and interviews:

- 1. Enhance Education in Science and Quantitative Reasoning
- 2. Support Efforts to Train Students to Write Well
- 3. Promote Quality Undergraduate Language Education
- 4. Develop a Global Perspective among All Yale College Graduates
- 5. Ensure that International Students Can Make the Most of Yale College
- 6. Secure Yale's Status as a Leader in the Arts for Undergraduates
- 7. Enhance the Freshman Year Experience
- 8. Strengthen Student Life

Considerable progress was identified for each of the areas with the greatest growth found for increased international experiences. The full report can be seen at <u>Report to the Yale College Faculty on the Progress of the CYCE</u>; findings also are discussed in Standard 4 (beginning on page 23).

Some notable recommendations and findings excerpted from the report:

- *Internationalization:* The number of international summer experiences taken by undergraduates has tripled, and the total number of international experiences has doubled. We met the goals for increasing and diversifying the international population of undergraduates. We are continuing to develop programs that engage local resources and international opportunities, such as the Global Health Fellows program.
- *Foreign language requirement*: The total number of language course enrollments is steady, but with shifts among languages and levels. Over 60% of our students exceed the new language requirement. The Center for International and Professional Experience continues to seek additional opportunities for expanding summer experiences abroad, both in language study and internships.
- Teaching and Learning in Science, Technology, Engineering, and Math (STEM) Disciplines and the Quantitative Reasoning (QR) Requirement: More than eighty courses for non-science majors and students with limited quantitative background have been developed or substantially enhanced, around fifty of which are offered in any year. The Science and QR Councils offer serious scrutiny of these courses, resulting in much more consistency in their rigor. Non-majors still report dissatisfaction with their experiences, and attrition from STEM majors remains too high. We also need to give further attention to math and statistics teaching. The deferral of improvements to undergraduate science and engineering facilities with the economic turndown has squeezed teaching and learning opportunities, and we need to advance the upgrading and expansion of teaching laboratories in the near term, but with a forward-looking program.
- *Writing (WR) Requirement:* Studies of the writing portfolios for the Classes of 2008 and 2010 show greatest improvements for many students when English 114 is the students' first WR class. To that end, we will work to expand capacity in English 114. We must also promote WR courses in majors outside the humanities for upper-level students.
- Arts: Seven new or renovated theater spaces have been created since 2000. The new position of associate dean for the Arts has made possible the coordination of relationships between professional schools and undergraduates. Facilities, especially Hendrie Hall (now in design

phase), need to be upgraded and expanded, and we need more opportunities for non-majors to take arts courses. We also need to study further the question of arts creation and performance in the curriculum.

Since the 2010 study, continual progress has been achieved toward reaching the CYCE goals. Also, increased international efforts have led to enhanced assessment activities both by the Center for International and Professional Education (CIPE) and by The Whitney and Betty MacMillan Center for International and Area Studies (MacMillan Center) (see descriptions later in this essay).

Reviews of Undergraduate Majors

Departmental Reviews. For many years departments have undergone a process of self-study and comprehensive review through the departmental visiting committee cycle. Twelve such reviews of FAS departments have occurred since 2009. These reviews serve an important function in allowing programs to take periodic stock in answer to a range of questions, but the broad scope of the review does not allow for deep scrutiny of the undergraduate programs. At the level of undergraduate majors, the Committee on Majors (COM) was initiated after Yale's 1999 Ten-Year NEASC review, partly at the suggestion of the CIHE. This committee conducts periodic reviews of majors, but since there are nearly ninety departmental and program majors, many majors have not been addressed since the inception of the COM. In addition, three undergraduate engineering programs (chemical engineering, electrical engineering, and mechanical engineering) maintain accreditation with the Accrediting Board for Engineering and Technology (ABET), which includes demanding assessment.

Major Goals Project. Both to prepare this Fifth-Year Interim Report and to provide comparable information both for potential Yale applicants and their families and also for Yale undergraduates exploring decisions about majors, in 2013-2014 the Committee on Majors requested basic goals for graduates in each major. In collaboration with directors of undergraduate studies (DUSs) and the Committee on Majors, the associate dean for assessment gathered the goals listed in Appendix D for every major. These goals have been edited (with approval of DUSs) to ensure that similar goals are worded in like ways but also to ensure that unique goals are clearly differentiated. In 2014-2015 we plan to post these goals on a public web site.

Intensive Majors Project. The Committee on Majors plans to work annually with about one-fifth of Yale College Majors to undertake a more systematic and intensive review of how well graduates achieve their majors' goals. This began in 2013-2014 for the following 18 majors:

- Biomedical Engineering
- Chemical Engineering
- Classics
 - o Classical Civilization
 - Classics (Greek and Latin)
 - Classics (Greek)
 - Classics (Latin)
 - Ancient and Modern
- East Asian Studies
- Economics

- Economics and Math
- Electrical Engineering
- English
- Latin American Studies
- Linguistics
- Mechanical Engineering
- South Asian Studies
- Special Divisional Major
- Women, Gender, & Sexuality Studies

For each major, either all departmental/program faculty or a smaller faculty committee assessed either all graduates from the Class of 2013 or, for large majors, a sample of graduates. Most departments reviewed

senior projects in order to see how well the major's goals were achieved. Many also looked at graduates' transcripts, summaries of COFHE surveys of seniors and alumni, post-graduate plans for majors, and other outcomes. The faculty met to discuss their evaluations and to explore whether the goals or the curriculum of the major should be revised or whether they were satisfied with outcomes. Where faculty find that their curriculum needs revision, the COM will schedule a more thorough review with students and faculty and will consider any proposed curriculum changes, which then will be presented to the Yale College Faculty for approval. Reports from each faculty review include the following components: Goals of the Major, Review Process, Findings, and Conclusions. For the Engineering Majors that undergo ABET accreditation, we adapted the ABET reports for this purpose.

Each intensive major report indicated that this process was very useful both in understanding the major's current situation and also in projecting valuable revisions for the future. Examples of faculty comments include (note that identifying information has been redacted):

- While our students generally do well academically, some students struggle early, especially with core courses in math and science. It is suggested that the department look into developing a cadre of advanced undergraduates and graduate students to provide tutoring assistance to freshman and sophomores considering this major.
- We discussed the possibility of removing the senior essay requirement for some students, or making it a one-semester project.
- As can be seen in the attached chart, students in this major from the Class of 2013 are achieving the goals set out by the faculty. The committee noted that despite their efforts to try to quantify this information, goal achievement scoring in each category is inherently subjective and needs to be carefully considered in context.
- The committee is making a strong suggestion that the department consider having a Career Day for our undergraduates one day in the spring. The committee further suggests that current undergraduate majors be included in the discussion about such an event. At such a meeting, representatives from other graduate programs, medical programs, and regional industry hiring representatives would come in and talk to our undergraduates about career opportunities.
- Due in part to faculty leaves and the lack of a staff member for the laboratory, the student experience in our core lab courses has been mixed at times, and this is shown through the survey of the earlier graduating classes. Based mostly on the COFHE survey, it is felt that we need to further consider the current strengths and weaknesses of our laboratory course and our number of advanced course offerings each year.
- We are pleased with the goals that we stated in 2012, and don't feel the need to revise them.
- We discussed at length what we can do to raise the quality of the senior essays across the board, and thus the academic credentials of our majors, while at the same time reaching out to more students within Yale College. Our discussion can be summarized as follows: In order to achieve our goals with a greater number of majors, we should advise them to limit the 100-level courses they take to three at most. Moreover, the DUS should encourage our majors to choose an area of research by the end of their junior year, and discuss it with a member of the faculty before that summer (ideally in person, by e-mail if they are abroad).
- We need more uniformity in evaluating and grading the senior essays. A faculty member has already drafted a set of guidelines and received feedback on them from the rest of the faculty. We will try them out this semester, as we evaluate the essays of our current seniors.

Yale Graduate School of Arts and Sciences

In the fall of 2010, the Graduate School initiated an extensive review of the Ph.D. programs ("Improving Graduate Education"), surveying all doctoral programs and collecting other available data such as time-to-degree in order to measure the degree of program success across various dimensions and to create a uniformly accepted set of best practices that would improve outcomes. Specifically, the project correlated seven programmatic practices contributing to student success, with particular attention to increasing the quantity and improving the quality of advising and mentoring.

After reporting on the first survey, Graduate School deans met individually with department chairs and directors of graduate studies (DGSs) to discuss findings for their students and to inquire about future plans. Two additional surveys were conducted in 2012-2013: (1) A fall 2012 survey of doctoral students inquired about their graduate experience and (2) a spring 2013 survey of DGSs determined which programs were progressing toward implementation of best practices and which programs would benefit from further examination and consultation. Overall, the analyses resulted in better implementation of best practices with expectations of better doctoral student outcomes.

Attached to this report are summary profiles of graduate programs, which provide information about cohort size, attrition, time to degree and student placement. These profiles provide snapshots of each program in relation to student success. On a more detailed level, "Improving Graduate Education" pulled together a wealth of data that illustrated student success across multiple variables. It was noted, for example, that if attrition must occur, it is beneficial to all parties for it to occur sooner rather than later. The project recommended to programs an annual review of each student from the end of the first year on as well as frequent and early opportunities for independent research. Together, these two measures should help students decide more quickly if graduate school remains their best choice. The student survey in 2012 provided more detailed information by program about specific areas of support in which a given program was doing more or less well. The survey has provided an opportunity for the dean's office to work with departments and programs in need of help.

At Yale, as elsewhere, doctoral education is built upon long-established measures of disciplinary assessment (qualifying examinations, dissertation defense, professional conference presentations, and peer reviewed publication) as well as field-specific expectations (including competency with linguistic, quantitative, or technical skills) that are built into the requirements of graduate programs. The S- and E-Series forms and data publicly available on Yale web sites detail a number of basic assessment measures, such as attrition and time-to-degree (which, for the doctoral classes of 2003 to 2013, averaged 6.3 years).

Collecting and maintaining graduate student career outcome data is one important assessment measurement. The Graduate School surveys students at the time they submit their dissertations about their immediate career plans and again in five years (see S2 form and the Graduate School web site – by program, division, and total). Although increasingly we are open to careers for doctoral students in fields other than faculty positions, responses over several years outlined in the following table show that 55% of students at the time of graduation report that they will enter careers as faculty or post docs immediately after graduation, and five years later 66% report that they have faculty or postdoctoral positions. These percentages vary among the four FAS divisions.

	Classes of 2 At Gradu	003-2013 1ation	Classes of 1998-2008 5 Years after Graduation		
Career Data					
	Faculty %	Post Doc %	Faculty %	Post Doc %	
Humanities	44%	12%	76%	2%	
Social Sciences	40%	20%	67%	3%	
Natural Sciences	7%	45%	32%	22%	
Total Ph.D.s	23%	32%	54%	12%	

Yale Professional Schools

In preparing this fifth-year report, we contacted deans of the twelve professional schools and asked them to report how they implement assessment of learning outcomes for their professional students. Following are excerpts from their responses.

School of Architecture. Students anonymously evaluate their courses and their instructors. The chair of the curriculum committee and the dean read all of the evaluations, responding with course and/or instructor adjustments as needed. In addition, each instructor is privy to his or her evaluations and therefore has the ability to adjust accordingly. Where appropriate, instructors meet individually with the dean to discuss evaluations.

School of Art. The School of Art teaches both undergraduates and graduates, the latter in an unrivaled professional program that encompasses critical and art historical study of the multiple visual arts disciplines that form the core of that program – painting and printmaking, sculpture, photography, and graphic design, plus film studies at the undergraduate level, and new media such as video, installation, and performance at all levels. Assessment of student work is made in regular and frequent individual one-on-one critiques conducted by faculty and visiting artists (critics, curators, and art historians), as well as in group critiques in which faculty, visiting artists (critics, curators, and art historians) take part alongside other students. Final evaluation of a student's progress is the product of follow-up analysis by faculty and the DGS or DUS of the work in question, of the student's demonstrated strengths and weaknesses, and of the caliber of the critique each presentation occasioned. Where written work is required – for example in seminars on art history and critical theory – student papers are marked up and graded as would be the case in comparable courses in any other discipline.

Divinity School. The Divinity School has a robust program of learning outcomes assessment for each of its three degree programs.

The Master of Divinity degree assessment has been in place since 2008. The Divinity School faculty has established learning goals in four learning areas, in accordance with the guidelines of the Association of Theological Schools. M.Div. students are required to maintain an e-portfolio, reflecting both academic progress and professional development. That e-portfolio, including reports from the required supervised ministry internship experiences, is the basis for a mid-degree assessment consultation with the assistant dean of ministry studies and assessment, a faculty advisor, and ministry professionals invited by each student. Another such meeting is convened by the assistant dean of ministry studies during the final semester of study, with participation by the associate dean of student affairs and the associate dean of academic affairs.

Archival data are drawn from students' e-portfolios, from research conducted with participants in the mid-degree consultation, from national standardized ordination exams, and from the final semester consultation. These data lead to an annual written assessment report to the Divinity School faculty. The report is discussed at a faculty meeting and in smaller groups by teaching area. Issues are addressed, and attention is given to curricular matters, all of which have an important impact on student education.

A similar though somewhat less comprehensive learning outcomes assessment program was developed beginning in 2012 for the Master of Arts in Religion (MAR) and Master of Sacred Theology (STM) degrees, in response to new requirement from the Association of Theological Schools. This program is now fully in place.

The faculty established learning goals for each of the fourteen areas of concentration within the MAR degree program. MAR students maintain e-portfolios of academic work that reflect progress in achieving these learning goals. Students in the Comprehensive MAR program and students in the one-year Master of Sacred Theology degree program develop their own learning goals, and post-academic work that reflects similar progress. All MAR and STM students are required to post a continually updated narrative about their work, in dialogue with the learning goals.

These archival data sets, and the accompanying essays, serve the students as reference points on their academic journeys, and promote academic advising by faculty who review the records. Each of the degree programs will be assessed by faculty, working with the dean of ministry studies and assessment, on a rotating seven-year schedule, beginning in spring 2014. This review will result in annual assessment reports to the faculty relating to each part of the degree program that is reviewed, and will be part of an ongoing process of shaping student education at YDS.

School of Drama. Students conduct anonymous online course evaluations at the end of every term. Each faculty member sees his or her own course evaluations; department chairs see evaluations for all courses within their department and may see evaluations of courses in other departments that are required or elective for their students. The Drama School dean reads the evaluations of all courses in the school.

In 2011-2012, the school undertook a comprehensive school-wide curriculum review. Each department convened its faculty to consider how well their training program met current needs and anticipated evolving practice in their specialized field. Departmental focus groups were conducted with current students and alumni. Department chairs and other faculty in each of the nine disciplines visited the leading peer institutions in their fields, nationally and in some cases internationally, and each department invited outside reviewers, including faculty from other universities and practitioners from other theatres, to visit, observe classes and professional work, and meet with students and faculty. Every department made changes to its program in response to this assessment. Certain school-wide needs also emerged from the curriculum review: improving skills in collaboration and communication, increasing opportunities for multidisciplinary learning, conducting deeper exploration of specialized topics in particular disciplines. Accordingly, an annual Seminar Week each winter has been created, during which approximately fifty modular workshop sessions focused on these goals are offered.

Also in place are informal mechanisms for assessing students' learning experiences, including periodic Deans' Forums, open discussion sessions for interested students with the dean, deputy dean, and associate dean. At the end of every academic year, the deans also meet with all students by department to discuss what aspects of their training are working well and what needs improvement. The Drama School dean meets individually with each department chair to share the student feedback and discuss changes that might be made.

Each department conducts periodic performance reviews of its students, with varying methods because the nature of the training differs. In Theater Management, for example, students receive mid-point and final evaluations from the supervisors of their professional work assignments, as well as a 360-degree review of their performance at the end of every semester. These six performance reviews, including selfevaluations and evaluations by faculty, professional work supervisors (who may be faculty, staff, or students), supervisees, and classmates, provide a dynamic assessment of the student's progress and professional growth over the course of the three-year program.

School of Engineering and Applied Science. School of Engineering & Applied Science. Yale's School of Engineering & Applied Science (SEAS) consists of the departments of biomedical engineering, chemical & environmental engineering, electrical engineering and mechanical engineering & materials science. Chemical engineering, electrical engineering, and mechanical engineering are accredited by the Accreditation Board for Engineering & Training (ABET). The accreditation cycle is six years, with the programs undergoing re-evaluation during the fall of 2014. The assessment processes in each SEAS department depends on whether the department is ABET accredited.

For the accredited programs (chemical engineering, electrical engineering and mechanical engineering) ABET requires that the Departments develop program educational objectives (PEOs) and student outcomes. The PEOs specify the department's goals for its graduates within 3-5 years of graduation. These PEOs must be developed in partnership with a broad constituent base including students, graduates, faculty, employers and graduate school programs. While the evaluation of the PEOs is not subject to review (given the long time frame) of the ABET evaluators, the accreditation agency does review the systems that ensure that all constituents are involved in ensuring the goals remain relevant and current.

Regarding the attainment of student outcomes (11 in total ranging from competence in engineering to awareness of global issues), the ABET evaluators review the systems and processes to monitor performance and institute continuous improvement. Each ABET-accredited program at Yale has a multidimensional system for evaluating the attainment of student outcomes, as well as a system to make changes and improve the learning system. The primary method of measuring the attainment of Student Outcomes includes a review of every homework set, exam and project within each required course in a program to identify the correlation between each assigned course artifact and specific Student Outcomes. Using these relationships and the scores of each assignment, exam or project, the attainment of Student Outcomes in that course is determined. The results from all of the required courses are then combined to identify the program's ability to achieve the specified Student Outcomes.

In addition to this method of outcomes assessment, each program uses other measures of attainment (such as evaluations of the capstone projects, exit interviews of graduating students, and surveys of alumni). Collectively these data are used to measure performance of the students' abilities to achieve student outcomes. The results of this review are used to make program changes, with those changes then re-evaluated to ensure the desired improvements result. This process of assessment, evaluation and improvement is a significant element of ABET's review. The process is detailed in separate chapters of the submitted self-study and examined as a component of the evaluation team's on-site visit (scheduled for fall 2014).

For the other programs, the primary system to review the attainment of outcomes is the Online Course Evaluation system that is administered by the Registrar's Office of Yale College. This system has a student participation rate of greater than 80% with the results provided directly to each faculty member (for their course) and to administrators (for their specific programs). The high participation rate is

promoted by providing early access to online reports of term grades for those students that submit a course evaluation. It is noted that this system is also used by the ABET-accredited programs in SEAS.

The survey examines the overall course assessment and includes course specific questions submitted by each instructor. The survey includes narrative sections where students are invited to respond to specific questions and provide general information on the course and instruction. The collected information is available to students, faculty members, and administrators (though faculty members can only review material from their own course). These data have been used to evaluate performance and the achievement of program-specific outcomes in biomedical and environmental engineering. In addition, feedback has been used with faculty members to guide improvements.

In addition to these measures, it is also noted that each SEAS department has established and is implementing a department strategic plan. While these plans cover a wide spectrum of departmental perspectives, they also include a review of the program's curriculum to ensure that course coverage and information delivery supports the departmental goals.

School of Forestry & Environmental Studies. The School of Forestry & Environmental Studies (F&ES) offers master's degree programs in environmental management, environmental science, forestry, and forest science. Approximately 140 master's students matriculate each year to these two-year programs. Our Ph.D. program is smaller, but highly selective. The school makes, on average, 14 offers for admission to the Ph.D. program each year, with the yield typically exceeding 85%.

F&ES sponsors roughly 120 courses each year. These courses cover a broad range of environmental topics that draw from the natural, social, and policy sciences and are intended to provide students with strong theoretical grounding, professional skills, and practical experiences. The courses are taught by traditional academics (ladder faculty); resident, non-ladder faculty; and non-resident practitioners. The course offerings are dynamic, reviewed each year, and updated annually in response to changes in student interest and evolution of the fields of environmental management and science.

F&ES assesses student learning and the value of our curriculum in a number of ways. All courses receive written evaluations by our students. These evaluations are shared with the course instructors and reviewed by Master's Program Committee, who, in turn, may use the student-supplied information to provide feedback to course instructors. The evaluations are one metric that is used to gage the performance of ladder and non-ladder faculty alike.

The school also surveys students prior to graduation to gain information about their educational experiences. Students are asked to identify strengths and weaknesses in the course offerings and curricular structure and to make suggestions for improvement. The responses to these surveys are considered by the student-service staff and entire faculty and are discussed at a regularly scheduled faculty meeting.

Our school's Career Development Office, together with a subset of our school's centers, survey alumni and employers on a periodic basis. The results of these surveys are extremely valuable. They provide first-hand information on the preparedness of our students to succeed in current jobs that are available to environmental professionals. Moreover, we learn about aspects of our degree programs that should be improved to make our students more competitive, particularly in regards to gaps in curricular coverage or professional skills. *Law School.* The accreditation body for law schools, the American Bar Association ("ABA"), requires that every law school "maintain an educational program that prepares its students for admission to the bar, and effective and responsible participation in the legal profession." The ABA requires that law schools provide substantial instruction in (1) the substantive law generally regarded as necessary for effective and responsible participation; (2) legal analysis and reasoning, legal research, problem solving, and oral communication; (3) writing in a legal context; (4) other professional skills generally regarded as necessary for effective and responsible participation in the legal professiol, and responsible participation in the legal profession in the legal profession; (4) other professional skills generally regarded as necessary for effective and responsible participation in the legal profession; and (5) the history, goals, structure, values, rules, and responsibilities of the legal profession and its members.

To ensure that Yale Law School meets these standards and provides its students with the necessary knowledge and skills for effective and responsible participation in the legal profession, as well as other related professions they may enter, a number of flexible but rigorous academic requirements have been established. To earn the JD degree, each student must:

- Complete required courses in constitutional law, torts, contracts, civil procedure, and criminal law. Students must demonstrate knowledge of each substantive field through a final examination or a set of papers that is evaluated by a full-time faculty member.
- Complete at least one course that requires the close supervision of professional skills by a faculty member.
- Complete a course substantially devoted to issues of legal ethics or professional responsibility.
- Complete a program in basic legal research and legal writing during the first semester, including iterative practice in legal writing with individualized feedback.
- Complete two major research papers with individual supervision by a faculty member.

The Law School tracks the outcome of each of these requirements for each student. In addition, the Law School, through its faculty committees, engages in a continuous process of self-study. Various faculty committees periodically study and report on the effectiveness of the requirements and programs listed above, as well as on the general curriculum and overall educational experience. For example, in the past two years faculty committees have studied the range of courses that students select and their performance in those courses, the effect that the academic calendar has on student learning and well-being, and the legal writing program. The faculty as a whole then discusses these studies and uses them as the basis for maintaining or amending the academic program.

Finally, the Law School uses a number of external measures to monitor and assess the effectiveness of our students' preparation and training. For example, graduates' bar passage rates in various states and the success of graduates in obtaining desirable jobs and judicial clerkships are closely followed. Findings in these areas become a basis for making appropriate adjustments in programs.

School of Management. Since 2006, the Yale School of Management has delivered its integrated curriculum to MBA students. The integrated curriculum is carefully planned to orient students with foundational skills and knowledge while building broader understanding of business and its impact on society. Drawing on expertise from the full range of traditional business disciplines, courses are designed to teach what is needed to lead a thriving organization. The curriculum incorporates a range of formative and summative assessments, and is thoughtfully sequenced to support scaffolded learning.

Assessment begins upon admission, when students identified for support interventions are invited to participate in our pre-term math camp and are matched up with tutors upon arrival. Preparatory course modules, taken online, are offered to all students in select areas of the curriculum; module outcomes are used to match students with relevant resources to support academic achievement.

As students begin the core sequence, they are introduced to a range of skills and vernacular that serve to baseline the class and deliver foundational knowledge for advanced coursework that lies ahead. Case studies, individualized and group activities, 360 assessments, office hours, and review sessions – both TA and peer-driven – augment traditional means of communicating and measuring knowledge such as lectures, cold calling, participation grading, and exams and quizzes. TAs and student government work closely with instructors and school administrators to provide feedback on struggling learners and course efficacy. Orchestrated assignments are implemented to measure communications skills and prompt coordination with our Professional Communications Center when extra support is needed.

Throughout the curriculum, the school continues to experiment with activities that link courses and content more closely together and allow for "high-touch" learning experiences. Indirect assessments are used throughout the program to survey students on the curriculum and quality of instruction, as well as their ability to bridge preparation with practice during the summer internship. Employers too are interviewed to provide feedback about the strengths and weaknesses of our student applicants. Assessments, both direct and indirect, are used in the review of courses, instructors and teaching plans, as well as to identify areas of the curriculum where more offerings or better coordination are needed.

School of Medicine. In the first two years, students take examinations in each of the basic science courses. Course directors write and set standards for these examinations, called "qualifiers," which include mostly multiple choice but also some essay questions. Students who fail a qualifier meet with the course director for remediation, including review of incorrectly answered questions. If a student fails two qualifiers, his or her academic advisor is notified. In both the basic science courses and clinical science modules, students may choose to take optional formative self-assessment exercises. Small group facilitators assess student professionalism and communication skills in written narrative commentaries.

In the clerkships, students participate in multiple formative assessments using standardized patients, simulations, portfolios, write-up reviews, direct observation and written examinations. Each student also receives a final summative assessment, including a grade and narrative comments based on a consensus of impressions from direct observation by supervising attendings and residents.

In order to graduate, students must pass all qualifiers and clerkships. In addition, they must pass a sevenstation comprehensive clinical skills examination held at the University of Connecticut Assessment Center and the USMLE Step 1, Step 2 CK (clinical knowledge), and Step 2 CS (clinical skills) national board examinations.

Assessment information is used by students to direct their learning, by academic advisors who meet periodically with students to provide academic and career guidance, and by the Progress Committee to monitor students' suitability for advancement and graduation. In addition, assessment information is included in the Medical Student Performance Evaluation that is provided to the graduate medical education programs where the student is applying for residency.

School of Music. The School of Music is a graduate professional school that prepares gifted young artists for major professional careers. Assessment is present in virtually every aspect of the curriculum, including required performances that are reviewed by faculty and professional critics in some instances, individual instruction that has immediate feedback, and peer assessment in master classes and seminars. The success of this continuous instructional assessment is reflected in the school's high international standing and the positions and honors earned by students and graduates of YSM.

School of Nursing. Student evaluation throughout enrollment at the Yale School of Nursing (YSN) is both formative and summative. Learning objectives are developed to assure that students demonstrate essential knowledge required by nursing and midwifery accrediting agencies and include identified performance competencies.

Formative evaluations occur periodically during each course to appraise whether the student is meeting learning objectives, and vary based on how the course is delivered and by individual professors. These can include quizzes, examinations, presentations, written papers, and clinical performance. Summative evaluations occur at the end of each course to demonstrate successful mastery of the content and/or skill attainment, generally through examinations, written papers, and clinical performance. Summative evaluations are required for the student to move to the next semester of study. A final summative evaluation is completed at the end of the student's program of study, with different mechanisms based on the student's specialization. Some students may complete a written comprehensive examination demonstrating theoretical knowledge, but all submit a portfolio summarizing their theoretical and clinical attainment, presentation of their professional profile, and demonstration of scientific writing.

If a student is making insufficient formative progress in the acquisition of knowledge and/or clinical skills, or in any aspect of the clinical management process, the course coordinator develops a written learning plan with input from the student's advisor and the student. If a formal learning evaluation is completed, suggestions from the Resource Office on Disabilities may also be incorporated into an individualized plan. The course coordinator and the academic advisor meet with the student to discuss the objectives and strategize approaches and time frames in which to achieve them. The plan could include scheduling additional clinical experiences, tutoring sessions, and/or submission of written work, such as case studies, to the course coordinator or the academic advisor. The faculty member and the student sign the learning plan. Each course specifies these policies in their course materials.

YSN undertakes a yearly school-wide evaluation of how well students are attaining essential theoretical and clinical competencies. This is accomplished in the following ways:

- Student Course Evaluations direct student assessment of how well each course helped them attain knowledge and skills;
- Final Program Evaluation students complete an evaluation of their experience with learning at YSN in an exit survey;
- Educational Benchmarking Inc. formally collects data on students' attainment of employment and assessment of their preparation for their specialty;
- YSN monitors the success rates and performance on content areas on national certification examinations.

Using the data collected above, YSN collectively and by specialty evaluates the effectiveness of the curricula and revises courses and clinical placements as appropriate. An example of this was the evaluation of the 2013 students' performance on the American Midwifery Certification Board examination. Although they were successful in achieving certification, their pass rates were below national average in two areas, thus content was revised and clinical experiences were enhanced.

School of Public Health. YSPH evaluates student learning outcomes by measuring competency attainment. The procedures used to monitor and assess student progress in meeting stated competencies are: 1) student competency self-assessment surveys; 2) assessment by course instructors and advisors; 3) preceptor evaluation of student internships; and 4) degree completion and job placement.

A required competency self-assessment is completed by incoming students and again just prior to graduation. Students rate proficiency in the core competencies as well as those specific to their department, division, or track, according to the following scale: 1 = no knowledge; 2 = a little knowledge, but unable to perform skill; 3 = some knowledge, and able to perform skill with assistance; 4 = a lot of knowledge and able to perform skills independently; and 5 = mastered skill, could perform independently and instruct others. The completion of these surveys is mandatory. The Education Committee compares the results from incoming and graduating student surveys to assess the attainment of competencies. The goal is a significant increase in the average score for each competency. The Education Committee addresses any deficiencies in competency attainment in a given program. Specifically, the associate dean for academic affairs and members of the Education Committee work with the relevant faculty to identify potential gaps in the curriculum and modify courses and course offerings as means to enrich the curriculum and to improve competency attainment within these programs.

Monitoring and assessment of student progress toward achieving competencies also occurs within YSPH core, departmental, practicum and capstone courses. Faculty members specify learning objectives and course requirements, and indicate how student progress will be assessed in the course syllabus and Classes V2 web site. Each course instructor is responsible for evaluating student progress in his or her individual course. Methods of assessment vary among courses, but typically include some combination of the following: assignments, quizzes, examinations, laboratory sessions, research papers, group projects and oral presentations. The course instructor assigns grades: Honors-H, High Pass-HP, Pass-P, or Fail-F.

The academic advising system plays a crucial role in monitoring and evaluating student achievement on an ongoing basis. An academic advisor is assigned on matriculation according to the student's area of interest. MPH students meet with their academic advisor at least once each semester to review their academic performance and plan their course of study, including internship and thesis. The advisor is responsible for working closely with the student to monitor academic progress, select courses, develop career plans, and ensure that students receive assistance necessary to master competencies for their specific degree (e.g., extra tutoring). Additionally, the associate dean for student affairs and the YSPH registrar review MPH student transcripts each term after all grades have been recorded. The Committee on Academic Progress is notified about any student who has received a failing grade in a course that semester.

The summer internship is a primary vehicle for the attainment of competencies in public health practice. At the end of the internship, the preceptor completes a preceptor evaluation form to rate the intern's performance.

The primary outcome measures assessed by YSPH in determining student achievement are the degree completion and job placement rates. Over the last three years we have averaged a 97% degree completion rate and a consistently high percentage of our students are either employed or continue their education after graduation. These data support the conclusion that our graduates are qualified for their chosen career path, which is the ultimate indicator of their achievement in the program.

Other Academic Program Evaluations

This section summarizes outcomes assessment efforts in three other academic programs:

- Center for International and Professional Experience (CIPE)
- The Whitney and Betty MacMillan Center for International and Area Studies
- Freshman Scholars at Yale

CIPE Assessment. The Center for International and Professional Experience (CIPE) facilitates nearly 1,300 undergraduate student experiences abroad each year to help students combine academic study of the international world and first-hand experience of foreign cultures in purposeful and imaginative ways. Since Yale's last comprehensive accreditation report was submitted, CIPE has been working to implement an assessment process that defines and documents the learning outcomes associated with international experience. Assessment efforts prior to 2008 had been limited to collecting survey responses related to student satisfaction. Since 2008, CIPE has aligned many of its survey instruments with desired learning outcomes. For example, an item in earlier surveys would have read: "Would you recommend this program?" The revised version of that question now asks students to rate how strongly they agree with the statement: "I would recommend this program to a student who is seeking to gain knowledge of other cultures through academic study."

CIPE has used results from these revised Yale-specific surveys as well as the responses of Yale students to external measures of "global competency" (such as the Global Perspective Inventory) to document several positive impacts of international experience among participants. These include:

- Improved interpersonal skills and an eagerness to make connections with people who are different from them themselves;
- A desire to continue their studies and engagements with the larger world (at Yale and elsewhere);
- A greater sense of community, partly because they are learning how to engage productively with a broader spectrum of people; and
- Increased (but tempered) confidence in dealing with new people and new situations, representing a foundational aspect of students' eventually taking informed and capable leadership positions in their chosen professions.

CIPE has been working to continue moving away from anecdotes and toward a deeper process of assessment. One goal for future assessment efforts is to collect data on the long-range outcomes for Yale alumni who participated in CIPE programs years earlier. At each step in the development of the assessment programs, student learning will remain the focus, such that the assessment process will prompt students to reflect and to build upon their experiences through CIPE. By improving upon its work through ongoing and evolving assessment practices, CIPE aims to help students recognize that learning can occur when they engage thoughtfully with, and take responsible ownership over, their opportunities at Yale and abroad.

The Whitney and Betty MacMillan Center for International and Area Studies. The MacMillan Center is Yale's principal center for teaching and research on international affairs, societies, and cultures around the world. It endeavors to make understanding the world outside the borders of the U.S., and America's role in the world, an integral part of the research, liberal education, and professional training at the university. Since 2009, the MacMillan Center has piloted a system for assessing outcomes of international study and foreign language training (I&FL) related to post-graduate employment, volunteer service or further studies. Student engagement has been tracked by enrollments in IFL-focused courses across disciplines and in applications and awards for competitive travel support for field research and study.

The first report of the multi-year International Education Assessment Project, prepared in spring 2014, summarized results about four topics:

- Post-graduate career impact of I&FL training
- Student outcomes and plans at the time of graduation (2012, 2013, and 2014 in the field)
- Curricular strength and student engagement in I&FL program
- Extracurricular resources, focusing on overseas travel support from Yale resources for students at all levels

Usefulness of I&FL training in post-graduate plans. A major "take home" outcome question (and a key interest of the federal grant agency) was whether and how students' I&FL training and networks would be useful for their long-term plans. Respondents checked all the ways they foresaw using their I&FL training in the next five years. In 2013, more than half of students who had participated in I&FL training expected to use the tools they acquired in their professional work; among Ph.D. students in the Graduate School, MA students in the MacMillan Center's own academic programs, and students from the School of Management, the percentage increased to 80%. Many others thought that these skills would also be useful for volunteer work and studies, too. In fact, volunteering was quite consistently the top expected avenue for using foreign language skills.

Freshman Scholars at Yale. The Freshman Scholars at Yale (FSY) program was created to introduce college-level academics and campus resources to incoming students with limited or no prior exposure to higher education. The thirty-three participants in the inaugural program arrived on campus on July 7, 2013, and spent the next five weeks living together in a residential college, taking one of three sections of English 114, participating in a variety of workshops to develop skills necessary for success (including time management, note-taking, and effective reading), and learning about the potential support services they could access as students (such as tutoring at the Writing Center and Quantitative Reasoning Center).

Establishing a framework for rich assessment of the program was built into the earliest planning stages. For example, since the effect of FSY as a "treatment" can be best estimated by comparing outcomes of participants to outcomes of those in a "control" group, three possible comparison groups were identified during the selection process: students who qualified for the program but were not invited, students who qualified and were invited but did not participate, and the remaining non-qualifiers who comprise the Class of 2017.

In the spring of 2014, the Office of Institutional Research (OIR) completed an initial review of how well FSY contributed to students' preparation for the rigors of their first year at Yale. Analyses of the 2013 orientation survey (completed by nearly 80% of all students) offer preliminary evidence of FSY's success. Compared to students who qualified for FSY but were not invited, the students who did participate were more likely to strongly agree that they were prepared to get academic advice and support, to ask for help when needed, and to know what to do when something goes wrong. On these measures (and before controlling for observed differences between students in each group) the statistically significant advantages of FSY participants range from twenty-six percentage points to forty-four percentage points.

The academic activity during orientation that FSY participants found most valuable was meeting their freshman advisors. This could reflect existing research showing that similar programs succeed by preparing students to seek out resources and mentors who can offer ongoing support and guidance. At the same time, it may also suggest that the FSY program and staff could do more to address the individual students' questions and concerns about academic planning. Compared to students who were invited to FSY but did not participate, the advantages participants received from the program are less clear. This is particularly true for outcomes related to how valuable students found the orientation's academic and advising activities. The higher proportions of invited non-participants who found these activities valuable

could suggest that they proactively used orientation to acquire the information and resources they expected FSY would have provided.

Comparing the survey responses of students who qualified for FSY to current sophomores who would have been likely to qualify had the program existed in 2012 reveals consistent patterns between participants and non-participants. The parallel findings between participants and control groups from both years are further evidence that the effects of FSY are robust.

Although these initial results are positive and promising, they also raise additional questions about whether and how the benefits associated with FSY are sustained beyond the first few weeks of the first semester. The Office of Institutional Research is currently collecting survey responses for a follow-up study that will also examine measures like GPA, credits attempted, and distribution requirements completed. The survey has been distributed to all FSY participants, invited non-participants, and non-invited qualifiers, as well as a representative sample of the rest of the Class of 2017.

PLANS FOR THE FUTURE

Each member of the University Cabinet at Yale develops annual goals; deans and vice presidents discuss these goals with each other and with the president. Following this process of review and discussion, the president identifies comprehensive goals for the University. These goals are presented to and discussed with the Yale Corporation. The president also provides an annual assessment of progress toward goals, which is based on detailed assessments from each dean and vice president. Long term goals are refined as needed, based on these annual assessments.

In addition to the comprehensive goals described in Appendix X, there are overarching goals that are major priorities over the next three to five years. Generally addressing the major themes of teaching and learning, leadership, and university engagement beyond the campus, these six overarching goals include: expanded access; renewal of the faculty; teaching and learning for the professions; leadership development and recruitment; and local and global partnerships. They build on and are related to the comprehensive goals but merit special mention here because of their importance to the university as whole and their impact on Yale's long-term future.

Expanded Access to Education

We will use the expansion of Yale College as an opportunity to prompt reflection on and renewal of the strength of the residential college system. Of special focus will be developing resilience, leadership skills, and community across colleges. We will also continue to be intentional and deliberate about increasing the percentages of undergraduates who are first-generation in college, from international backgrounds, and minorities. Finally, we will have a clearer sense of what the "Yale Way" looks like for on-line education. This approach is emerging as our faculty adopt flipped classroom modes of instruction, explore innovative ways technology can support pedagogy, and work to assess even more effective methods of teaching and learning.

Renewal of the Faculty

Slow rates of faculty retirement have made it difficult to recruit new talented faculty in some departments and schools. Over the next five years, however, there will be increasing rates of attrition among what is already a significant pool of older faculty. This gives us the ability to recalibrate faculty resources to support areas of growing interest and importance, using work of the Academic Review Committee as a guide.

Teaching and Learning for the Professions

The importance of teaching has been a hallmark of Yale values. Over the next five years, we will continue our focus on transforming teaching and learning for the professions. In five years, we plan to have the following innovations in place or underway: (1) a full assessment and fine-tuning for a new SOM degree and for the Global Network program; (2) recognition as a national model for Yale's approach to medical education with curriculum that blends basic science, clinical science, and patient contact from day one; (3) better leveraging the unique potential of having four art schools by breaking down barriers to collaboration among them and creating more connections to undergraduate education; (4) creation of partnerships with the Center for Engineering Innovation and Design in schools and practice areas usually considered unrelated to engineering, such as Divinity and Nursing; (5) expanded professional education to practitioners via targeted on-line programs; (6) continued focus on streamlining the process of joint faculty appointments, making it easier for schools to collaborate.

Leadership Development and Recruitment

We are likely to have a substantially new leadership team in place in five years. In anticipation of retirements over the next three to five years, we will develop succession and recruitment plans for deans and for key administrative positions (vice presidents, other senior staff, and deans). We are facing similar turnover in the ranks of alumni who are part of our governance and senior advisory bodies, and will be developing a more robust process to identify, recruit, and nurture strong candidates among alumni for those roles. These changes will give us opportunities to increase the diversity among senior leaders.

Local and Global Partnerships

Yale's partnership with New Haven over the past 20 years has transformed the core of our city, led to significant collaboration, and benefited both the university and the city. As we take this mature partnership to its next level over the next five years, we will focus on opportunities for entrepreneurship in New Haven and seek to coordinate efforts across the University that can grow the economy of the region. Part of this will include developing the criteria and support for identifying "intellectual entrepreneurs."

The first years of Yale's fourth century may be considered the China years, and we will continue to build on our significant partnerships there with the creation of the Yale Leadership Center in Beijing. We will recruit deans, directors, and alumni to supplement the planned SOM programs and look for new partnerships over the next five years. Even as we continue our connections with China, a major focus for the next five years is Africa. Our Africa Initiative is being launched with commitment throughout the campus (from such diverse units as undergraduate admissions, professional schools, international studies, the Jackson Institute), and a major effort for the next several years is assessing which programs and activities will have the most long-term impact.

Yale

APPENDICES

Fifth-Year Interim Report to the New England Association of Schools and Colleges Commission on Institutions of Higher Education

Yale University New Haven, Connecticut

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Appendix A

Interim Report Forms

INTERIM REPORT FORMS GENERAL INFORMATION

Institution Name:	Yale University
OPE ID:	1426
	Annual Audit
	Certified: Qualified
Financial Results for Year Ending:	<u>Yes/No</u> <u>Unqualified</u>
Most Recent Year	2013-14 Yes
1 Year Prior	2012-13 Yes
2 Years Prior	2011-12 Yes
Fiscal Year Ends on:	June 30
Budget / Plans	
Current Year	2013-14
Next Year	2014-15
Contact Person:	Matt Lawrence and Beverly Waters
Title:	Project Analyst
Telephone No:	(203) 432-1329 (B.Waters)
E-mail address	matt.lawrence@yale.edu beverly.waters@yale.edu

Standard 1: Mission and Purposes

Attach a copy of the current mission statement.								
Document	URL	Date Approved by the Governing Board						
Institutional Mission Statement	yale.edu/about/mission.html	Current						

Standard 2: Planning and Evaluation

	Year of		
PLANS	Completion	Effective Dates	URL
Strategic Plans			
Current Strategic Plan			
Next Strategic Plan			
Other institution-wide plans			
Master plan			
Academic plan			
Financial plan			finance.yale.edu/financial-reports-0
Technology plan			its.yale.edu/about/strategic-planning
Enrollment plan			
Development plan			giving.yale.edu
Sustainability Plan			sustainability.yale.edu\planning-progress\sustainability-strategic-plan-2013-2016

Academic program review

Program review system (colleges and departments). System last updated: Program review schedule (e.g., every 5 years)

URL Departments are reviewed by the Provost Office approximately every five years.

Standard 3: Organization and Governance

Please attach to this form:

1) A copy of the institution's organization chart(s).

Governing Board

By-laws Board members' names and affiliations

URL
yale.edu\about\bylaws.html
yale.edu/about/corporation.html

Standard 3: Organization and Governance (Locations and Modalities)

Campuses, Branches, Locations, and Modalities Currently in Operation (See definitions, below)

(insert auanional rows as appropriate.)	City	State or Country	Date Initiated**	Enrollment (AY 2013-14)
Main campus	New Haven	СТ	1717	12,109
** This is the year that the first building w	as erected.			
Distance Learning, e-learning				0
Distance Learning, other Modality				0
Correspondence Education				0

Definitions

Main campus: primary campus, including the principal office of the chief executive officer.

Other principal campus: a campus away from the main campus that either houses a portion or portions of the institution's academic program (e.g., the medical school) or a permanent location offering 100% of the degree requirements of one or more of the academic programs offered on the main campus and otherwise meets the definition of the branch campus (below).

Branch campus (federal definition): a location of an institution that is geographically apart and independent of the main campus which meets all of the following criteria: a) offers 50% or more of an academic program leading to a degree, certificate, or other recognized credential, or at which a degree may be completed; b) is permanent in nature; c) has its own faculty and administrative or supervisory organization; d) has its own budgetary and hiring authority.

Instructional location: a location away from the main campus where 50% or more of a degree or Title-IV eligible certificate can be completed.

Distance Learning, e-learning: A degree or Title-IV eligible certificate for which 50% or more of the courses can be completed entirely on-line.

Distance Learning, other: A degree or Title IV certificate in which 50% or more of the courses can be completed entirely through a distance learning modality other than e-learning.

Correspondence Education (federal definition): Education provided through one or more courses by an institution under which the institution provides instructional materials, by mail or electronic transmission, including examinations on the materials, to students who are separated from the instructor. Interaction between the instructor and the student is limited, is not regular and substantive, and is primarily initiated by the student. Correspondence courses are typically self-paced. Correspondence education is not distance education.



(3) Dual report to the vice president for New Haven & State Affairs

(4) Dual report to the dean or director of the unit

Standard 4: The Academic Program Headcount by UNDERGRADUATE Program Type

	3 Years Prior	2 Years Prior	1 Year Prior	Current Year*
For Fall Term, as of Census Date	(FY 2011)	(FY2012)	(FY 2013)	(FY 2014)
Certificate		II		
Associate				
Baccalaureate	5,310	5,349	5,405	5,430
Total Undergraduate	5,310	5,349	5,405	5,430

Standard 4: The Academic Program Headcount by GRADUATE Program Type

	3 Years Prior	2 Years Prior	1 Year Prior	Current Year*
For Fall Term, as of Census Date	(FY 2011)	(FY2012)	(FY 2013)	(FY 2014)
Master's	2,686	2,721	2,740	2,822
Doctorate	2,541	2,601	2,641	2,717
First Professional	1,085	1,105	1,050	1,070
Other	79	99	70	70
Total Graduate	6,391	6,526	6,501	6,679

Standard 4: The Academic Program (Credit Hours Generated at Undergraduate and Graduate Levels)

	3 Years	2 Years	1 Year	Current
	Prior	Prior	Prior	Year*
	(FY 2011)	(FY2012)	(FY 2013)	(FY 2014)
Undergraduate	97,986	98,938	99,778	100,506
Graduate	83,783	92,690	94,990	96,488

*"Current Year" refers to the year in which the interim report is submitted to the Commission.

Standard 4: The Academic Program (Summary - Enrollment and Degrees)

Fall Enrollment* by location and modality, as of Census Date 10/15/13

Degree Level/ Location & Modality	Associate's	Bachelor's	Master's and Intermediate*	Clinical doctorates (DNP)	Professional doctorates (D.F.A., J.S.D.)	M.D., J.D., DDS	Ph.D.	Special Students**	Total Degree- Seeking FTE
Main Campus FTE		5,419.0	2,770.0	14.5	56.0	1,070.0	2,616.0	72.5	12,018.0
Other Campus FTE									0.0
Branches FTE									0.0
Other Locations FTE									0.0
Overseas Locations FTE									0.0
On-Line FTE									0.0
Correspondence FTE									0.0
Low-Residency Programs FTE									0.0
Total FTE	na	5,419.0	2,770.0	14.5	56.0	1,070.0	2,616.0	72.5	12,018.0
Unduplicated Headcount Total	na	5,430	2,822	29	56	1,070	2,632	70	12,109
Degrees Awarded,									
Most Recent Year -									
July 1, 2013 - June 30, 2014									4,155

*The master's and intermediate counts also include certificate and technical intern students in Drama; artist diploma and certificate students in Music; GEPN certificate and post-masters certificate students in Nursing.

**Special Students include non-degree and visiting

Student Type/ Location & Modality	Non- Matriculated Students	Visiting Students	Title IV-Eligible Certificates: Students Seeking Certificates
Main Campus FTE			
Other Campus FTE			
Branches FTE			
Other Locations FTE			
Overseas Locations FTE			
On-Line FTE			
Correspondence FTE			
Low-Residency			
Programs FTE			
Total FTE			
Unduplicated			
Headcount Total			
Certificates Awarded, Most Recent Year	n.a.	n.a.	

Notes:

1) Enrollment numbers should include all students in the named categories, including students in continuing education and students enrolled through any contractual relationship.

2) Each student should be recorded in only one category, e.g., students enrolled in low-residency programs housed on the main campus should be recorded only in the category "low-residency programs."

3) Please refer to form 3.2, "Locations and Modalities," for definitions of locations and instructional modalities.

* For programs not taught in the fall, report an analogous term's enrollment as of its Census Date.

Standard 5: Faculty Faculty of Arts & Sciences Only

(Rank, Fall Term)									
	3 Ye Pr	ears ior	2 Years Prior		1 Year Prior		Current Year*		
	(FY 2011)		(FY 2012)		(FY 2013)		(FY 2014)		
Number of Faculty	FT	PT	FT	PT	FT	РТ	FT	РТ	
Professor	424	11	426	5	407	20	411	23	
Associate	82		76	-	75	-	88		
Assistant	180	1	176		171		164		
Instructor									
Other	151	106	152	136	172	130	163	132	
Total	837	118	830	141	825	150	826	155	

(Appointments, Tenure, Departures, and Retirements, Full Academic Year)

	3 Years Prior (FY 2011)		2 Years Prior (FY 2012)		1 Year Prior (FY 2013)		Current Year (FY 2014)	
# of Faculty Appointed	<u>FT</u> 239	<u>PT</u> 102	<u>FT</u> 232	<u>РТ</u> 125	<u>FT</u> 305	<u>PT</u> 115	<u>FT</u> 314	<u>РТ</u> 115
# of Faculty in Tenured Positions	961	23	981	23	976	49	1009	65
# of Faculty Departing	159	98	159	93	183	140		
# of Faculty Retiring	17	7	21	5	15	4		

*"Current Year" refers to the year in which the interim report is submitted to the Commission.

Notes: Professor, Associate, Assistant ranks included "unmodified" titles only. That is, does not include Professor of the Practice, Adjunct, Clinical Professor of Law. Does inlcude the tracked faculty in Medicine. "Departing" includes deaths. Tenured faculty includes phased retirement professors. Departures are shown with the last year they were still on the faculty, i.e., they left by the end of this year.
Standard 5: Faculty **Total University**

			(I	Rank, Fa	all Tern	1)		
	3 Y	ears	2 Ye	ears	1 Y	ear	Current	: Year*
	Pr	rior	Pri	or	Pr	ior		
	(FY	Z 2011)	(FY	2012)	(FY	2013)	(FY	2014)
	FT	РT	FT	РT	FT	PΤ	FT	РТ
Number of Faculty								
Professor	919	29	926	23	917	49	941	65
Associate	189	0	187	-	181	-	191	1
Assistant	580	16	617	20	633	20	669	29
Instructor								
Other	768	465	790	480	893	512	925	509
Total	2,456	510	2,520	523	2,624	581	2,726	604

(Appointments, Tenure, Departures, and Retirements, Full Academic Year)

	3 Y P	l'ears Prior	2 Y P	'ears rior	1 Y Pi	'ear rior	Cui Ye	rrent ear
	(FY	Z 2011)	(FY	2012)	(FY	2013)	(FY	2014)
	<u>FT</u>	<u>PT</u>	<u>FT</u>	<u>PT</u>	<u>FT</u>	<u>PT</u>	<u>FT</u>	<u>PT</u>
# of Faculty Appointed	239	102	232	125	305	115	314	115
# of Faculty in Tenured Positions	961	23	981	23	976	49	1009	65
# of Faculty Departing	159	98	159	93	183	140		
# of Faculty Retiring	17	7	21	5	15	4		

*"Current Year" refers to the year in which the interim report is submitted to the Commission.

Notes: Professor, Associate, Assistant ranks included "unmodified" titles only. That is, does not include Professor of the Practice, Adjunct, Clinical Professor of Law. Does inlcude the tracked faculty in Medicine. "Departing" includes deaths. Tenured faculty includes phased retirement professors. Departures are shown with the last year they were still on the faculty, i.e., they left by the end of this year.

HUMANITIES--TENURED

			Na	tive			Native H	awaiian or			Two o	or More								
	Bl	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	2	1	0	0	0	4			2	2			86	35			90	42	31.8%	8.3%
2004/2005	3	1	0	0	0	4			2	2			82	35			87	42	32.6%	9.3%
2005/2006	4	1	0	0	0	4			3	1			87	34			94	40	29.9%	9.7%
2006/2007	4	2	0	0	0	4			4	1			91	34			99	41	29.3%	10.7%
2007/2008	4	2	0	0	0	4			4	1			95	37			103	44	29.9%	10.2%
2008/2009	5	2	0	0	0	4			4	1			103	37	0	0	112	44	28.2%	10.3%
2009/2010	5	3	1	0	0	4			4	1			99	37	0	0	109	45	29.2%	11.7%
2010/2011	5	3	1	0	0	5			4	1			99	37	1	0	110	46	29.5%	12.2%
2011/2012	5	4	1	0	0	6	0	0	4	2	0	0	101	37	2	0	113	49	30.2%	13.6%
2012/2013	5	3	1	0	0	6	0	0	4	2	0	0	99	37	5	1	114	49	30.1%	12.9%
2013/2014	5	4	1	0	0	6	0	0	4	2	0	0	102	40	3	3	115	55	32.4%	12.9%

HUMANITIES--TERM

			Na	ntive			Native H	awaiian or			Two o	or More								
	B	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	2	4	0	0	0	7			4	0			52	36			58	47	44.8%	16.2%
2004/2005	1	5	0	0	0	6			4	1			51	35			56	47	45.6%	16.5%
2005/2006	1	5	0	0	1	6			4	2			45	35			51	48	48.5%	19.2%
2006/2007	1	4	0	1	1	7			4	2			43	32			49	46	48.4%	21.1%
2007/2008	2	4	0	1	1	8			3	2			40	31			46	46	50.0%	22.8%
2008/2009	1	3	0	1	0	8			2	2			38	32	0	1	41	47	53.4%	19.3%
2009/2010	0	2	0	1	0	8			1	2			38	31	1	1	40	45	52.9%	16.5%
2010/2011	2	3	0	1	0	5			1	1			37	29	1	2	41	41	50.0%	15.9%
2011/2012	2	4	0	1	0	3	0	0	1	1	0	0	33	25	1	3	37	37	50.0%	16.2%
2012/2013	2	2	0	1	0	4	0	0	2	1	0	0	26	22	8	6	38	36	48.6%	16.2%
2013/2014	1	1	0	0	0	6	0	0	2	1	0	0	29	21	5	8	37	37	50.0%	14.9%

SOCIAL SCIENCES--TENURED

			Na	ntive			Native Ha	awaiian or			Two o	or More								
	B	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	3	0	0	0	5	2			2	0			65	8			75	10	11.8%	14.1%
2004/2005	3	0	0	0	5	2			2	0			68	12			78	14	15.2%	13.0%
2005/2006	2	0	0	0	5	2			2	0			66	13			75	15	16.7%	12.2%
2006/2007	2	0	0	0	5	2			2	0			65	14			74	16	17.8%	12.2%
2007/2008	2	1	0	0	7	3			3	0			67	14			79	18	18.6%	16.5%
2008/2009	3	1	0	0	6	3			3	1			68	16	1	0	81	21	20.6%	16.7%
2009/2010	2	1	0	0	7	4			3	1			74	16	1	0	87	22	20.2%	16.5%
2010/2011	2	2	0	0	8	4			3	1			74	20	1	0	88	27	23.5%	17.4%
2011/2012	2	1	0	0	6	4	1	0	3	1	0	1	69	20	1	0	82	27	24.8%	17.4%
2012/2013	2	0	0	0	5	4	1	0	2	1	0	1	68	20	2	1	80	27	25.2%	15.0%
2013/2014	3	1	0	0	5	6	1	0	1	1	0	1	64	19	3	0	77	28	26.7%	18.1%

SOCIAL SCIENCES--TERM

			Na	tive			Native Ha	awaiian or			Two o	or More								
	Bl	ack	Ame	erican	As	ian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	0	5	0	0	2	1			2	1			35	20			39	27	40.9%	16.7%
2004/2005	0	7	0	0	3	1			2	2			33	15			38	25	39.7%	23.8%
2005/2006	0	8	0	0	6	3			2	2			37	14			45	27	37.5%	29.2%
2006/2007	0	8	0	0	5	4			1	3			29	10			35	25	41.7%	35.0%
2007/2008	1	6	0	0	4	5			1	3			30	10			36	24	40.0%	33.3%
2008/2009	3	5	0	0	5	5			1	2			32	14	0	1	41	27	39.7%	30.9%
2009/2010	3	4	0	0	5	5			2	1			30	23	0	2	40	35	46.7%	26.7%
2010/2011	3	2	0	0	5	7			2	1			30	21	0	2	40	33	45.2%	27.4%
2011/2012	4	1	0	0	5	7	0	0	2	1	0	0	27	21	0	3	38	33	46.5%	28.2%
2012/2013	4	1	0	0	4	7	0	0	1	1	0	0	19	20	8	5	36	34	48.6%	25.7%
2013/2014	3	0	0	0	4	5	0	0	1	1	0	0	22	18	10	6	40	30	42.9%	20.0%

BIOLOGICAL SCIENCES--TENURED

			Na	ntive			Native H	awaiian or			Two o	or More								
	Bl	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	0	0	0	0	2	0			0	0			30	8			32	8	20.0%	5.0%
2004/2005	0	0	0	0	2	0			0	0			31	7			33	7	17.5%	5.0%
2005/2006	0	0	0	0	2	0			0	0			31	7			33	7	17.5%	5.0%
2006/2007	0	0	0	0	2	0			0	0			32	6			34	6	15.0%	5.0%
2007/2008	1	0	0	0	2	0			0	0			33	6			36	6	14.3%	7.1%
2008/2009	1	0	0	0	3	0			1	0			35	6	0	0	40	6	13.0%	10.9%
2009/2010	1	0	0	0	3	0			1	0			33	7	0	0	38	7	15.6%	11.1%
2010/2011	1	0	0	0	3	0			1	0			35	9	0	0	40	9	18.4%	10.2%
2011/2012	1	0	0	0	3	0	0	0	1	0	0	0	33	9	1	0	39	9	18.8%	10.4%
2012/2013	1	0	0	0	3	0	0	0	1	0	0	0	30	7	4	2	39	9	18.8%	10.4%
2013/2014	1	0	0	0	3	0	0	0	1	0	0	0	32	8	3	1	40	9	18.4%	10.2%

BIOLOGICAL SCIENCES--TERM

			Na	ntive			Native H	awaiian or			Two o	r More								
	B	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	nces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	1	0	0	0	2	0			1	0			11	4			15	4	21.1%	21.1%
2004/2005	1	0	0	0	2	0			1	0			11	6			15	6	28.6%	19.0%
2005/2006	1	0	0	0	2	0			2	0			10	5			15	5	25.0%	25.0%
2006/2007	1	0	0	0	3	0			2	0			11	7			17	7	29.2%	25.0%
2007/2008	0	0	0	0	3	0			2	0			11	6			16	6	27.3%	22.7%
2008/2009	0	0	0	0	2	0			1	0			10	6	0	0	13	6	31.6%	15.8%
2009/2010	0	0	0	0	2	0			1	0			11	6	1	0	15	6	28.6%	14.3%
2010/2011	0	0	0	0	2	0			1	0			8	6	1	0	12	6	33.3%	16.7%
2011/2012	0	0	0	0	2	0	0	0	1	0	0	0	9	7	0	0	12	7	36.8%	15.8%
2012/2013	0	0	0	0	1	0	0	0	1	0	0	0	9	4	1	1	12	5	29.4%	11.8%
2013/2014	0	0	0	0	1	0	0	0	1	0	0	0	8	3	2	0	12	3	20.0%	13.3%

PHYSICAL SCIENCES--TENURED

			Na	ntive			Native H	awaiian or			Two o	or More								
	Bl	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	0	0	0	0	9	0			1	0			104	7			114	7	5.8%	8.3%
2004/2005	0	0	0	0	9	0			1	0			100	8			110	8	6.8%	8.5%
2005/2006	0	0	0	0	9	1			1	0			98	8			108	9	7.7%	9.4%
2006/2007	1	0	0	0	10	1			1	0			98	8			110	9	7.6%	10.9%
2007/2008	1	0	0	0	9	1			1	0			98	8			109	9	7.6%	10.2%
2008/2009	1	0	0	0	7	2			2	0			96	8	0	0	106	10	8.6%	10.3%
2009/2010	1	1	0	0	10	3			2	0			96	9	0	0	109	13	10.7%	13.9%
2010/2011	1	1	0	0	10	3			2	0			98	10	0	0	111	14	11.2%	13.6%
2011/2012	1	1	0	0	12	3	0	0	2	0	0	0	97	10	0	0	112	14	11.1%	15.1%
2012/2013	1	1	0	0	11	2	0	0	2	0	0	0	99	11	1	1	114	15	11.6%	13.2%
2013/2014	1	1	0	0	11	3	0	0	2	0	0	0	103	11	2	1	119	16	11.9%	13.3%

PHYSICAL SCIENCES--TERM

			Na	ntive			Native Ha	awaiian or			Two o	or More								
	B	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	1	2	0	0	9	3			1	0			42	5			53	10	15.9%	25.4%
2004/2005	1	2	0	0	8	3			1	0			44	6			54	11	16.9%	23.1%
2005/2006	1	2	0	0	5	2			1	0			43	5			50	9	15.3%	18.6%
2006/2007	1	2	0	0	7	2			1	0			41	7			50	11	18.0%	21.3%
2007/2008	1	2	0	0	9	3			1	0			37	8			48	13	21.3%	26.2%
2008/2009	3	2	0	0	12	4			1	0			35	11	0	1	51	18	26.1%	31.9%
2009/2010	3	1	0	0	9	2			1	1			34	15	2	1	49	20	29.0%	24.6%
2010/2011	3	1	0	0	9	3			1	1			32	16	3	1	48	22	31.4%	25.7%
2011/2012	3	1	0	0	9	2	0	1	1	1	0	0	26	15	3	1	42	21	33.3%	28.6%
2012/2013	3	0	0	0	7	2	0	1	1	1	0	0	16	9	14	2	41	15	26.8%	26.8%
2013/2014	3	0	0	0	8	3	0	1	1	1	0	0	15	10	17	2	44	17	27.9%	27.9%

TOTAL FAS--TENURED*

			Na	ntive			Native Ha	awaiian or			Two o	r More								
	Bl	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	5	1	0	0	16	6			5	2			285	58			311	67	17.7%	9.3%
2004/2005	6	1	0	0	16	6			5	2			281	62			308	71	18.7%	9.5%
2005/2006	6	1	0	0	16	7			6	1			282	62			310	71	18.6%	9.7%
2006/2007	7	2	0	0	17	7			7	1			286	62			317	72	18.5%	10.5%
2007/2008	8	3	0	0	18	8			8	1			293	65			327	77	19.1%	11.4%
2008/2009	10	3	0	0	16	9			10	2			302	67	1	0	339	81	19.3%	11.9%
2009/2010	9	5	1	0	20	11			10	2			302	69	1	0	343	87	20.2%	13.5%
2010/2011	9	6	1	0	21	12			10	2			306	76	2	0	349	96	21.6%	13.7%
2011/2001	9	6	1	0	21	13	1	0	10	3	0	1	300	76	4	0	346	99	22.2%	14.6%
2012/2013	9	4	1	0	19	12	1	0	9	3	0	1	296	75	12	5	347	100	22.4%	13.2%
2013/2014	10	6	1	0	19	15	1	0	8	3	0	1	301	78	11	5	351	108	23.5%	13.9%

TOTAL FAS--TERM*

			Na	ntive			Native Ha	awaiian or			Two o	or More								
	Bl	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	4	11	0	0	13	11			8	1			140	65			165	88	34.8%	19.0%
2004/2005	3	14	0	0	13	10			8	3			139	62			163	89	35.3%	20.2%
2005/2006	3	15	0	0	14	11			9	4			135	59			161	89	35.6%	22.4%
2006/2007	3	14	0	1	16	13			8	5			124	56			151	89	37.1%	25.0%
2007/2008	4	12	0	1	17	16			7	5			118	55			146	89	37.9%	26.4%
2008/2009	7	10	0	1	19	17			5	4			115	63	0	3	146	98	40.2%	25.8%
2009/2010	6	7	0	1	16	15			5	4			113	75	4	4	144	106	42.4%	21.6%
2010/2011	8	6	0	1	16	15			5	3			107	72	5	5	141	102	42.0%	22.2%
2011/2012	9	6	0	1	16	12	0	1	5	3	0	0	95	68	4	7	129	98	43.2%	23.3%
2012/2013	9	3	0	1	12	13	0	1	5	3	0	0	70	55	31	14	127	90	41.5%	21.7%
2013/2014	7	1	0	0	13	14	0	1	5	3	0	0	74	52	34	16	133	87	39.5%	20.0%

*MB&B is a department in both Medicine and FAS. All MB&B faculty, including Howard Hughes faculty, are included with FAS in this table. MB&B faculty are not included in the totals for Medicine.

MEDICINE (PAID & NON-PAID)--TENURED*

			Na	ntive			Native H	awaiian or			Two o	or More								
	Bl	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	5	0	0	0	19	4			6	2			273	54			303	60	16.5%	9.9%
2004/2005	6	0	0	0	21	4			7	2			278	59			312	65	17.2%	10.6%
2005/2006	6	0	0	0	21	3			7	2			282	62			316	67	17.5%	10.2%
2006/2007	5	0	0	0	20	6			7	2			275	66			307	74	19.4%	10.5%
2007/2008	6	0	0	0	25	8			7	2			281	67			319	77	19.4%	12.1%
2008/2009	6	0	0	0	28	8			6	2			278	68	0	0	318	78	19.7%	12.6%
2009/2010	6	0	0	0	27	9			7	2			286	71	0	0	326	82	20.1%	12.5%
2010/2011	6	0	0	0	28	10			7	2			288	76	0	0	329	88	21.1%	12.7%
2011/2012	5	0	0	0	32	10	0	0	9	2	0	1	290	84	1	0	337	97	22.4%	13.6%
2012/2013	5	0	0	0	30	9	0	0	9	2	0	1	280	83	28	5	352	100	22.1%	12.4%
2013/2014	5	0	0	0	38	10	0	0	9	2	0	0	309	90	18	5	379	107	22.0%	13.2%

MEDICINE (PAID & NON-PAID)--TERM*

			Na	ntive			Native Ha	awaiian or			Two o	r More								
	Bl	ack	Ame	erican	As	ian	Pacific	Islander	His	panic	Ra	nces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	8	9	0	0	53	33			10	3			280	165			351	210	37.4%	20.7%
2004/2005	7	11	0	0	62	32			9	6			289	183			367	232	38.7%	21.2%
2005/2006	6	11	0	0	77	40			10	9			292	187			385	247	39.1%	24.2%
2006/2007	5	11	0	0	81	43			12	8			289	200			387	262	40.4%	24.7%
2007/2008	5	16	0	0	85	45			11	10			304	216			405	287	41.5%	24.9%
2008/2009	8	16	0	0	91	52			11	10			305	226	5	1	420	305	42.1%	25.9%
2009/2010	10	18	0	0	94	66			9	11			318	226	9	2	440	323	42.3%	27.3%
2010/2011	12	17	1	0	102	66			10	13			335	240	2	2	462	338	42.3%	27.6%
2011/2012	15	19	1	0	106	76	0	1	15	14	0	1	344	255	8	10	489	376	43.5%	28.7%
2012/2013	17	17	1	0	96	67	0	1	15	15	0	1	309	218	67	65	505	384	43.2%	25.9%
2013/2014	16	18	1	0	103	78	0	2	16	16	0	2	332	242	53	53	521	411	44.1%	27.0%

*MB&B is a department in both Medicine and FAS. All MB&B faculty, including Howard Hughes faculty, are included with FAS in this table. MB&B faculty are not included in the totals for Medicine.

PROFESSIONAL SCHOOLS--TENURED

(EXCLUDES MEDICI

			Na	ntive			Native H	awaiian or			Two o	or More								
	B	lack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	5	0	0	0	10	1			1	0			75	31			91	32	26.0%	13.8%
2004/2005	5	0	0	0	9	1			1	0			78	31			93	32	25.6%	12.8%
2005/2006	5	1	0	1	9	1			0	0			77	32			91	35	27.8%	13.5%
2006/2007	5	2	0	1	10	1			0	0			80	37			95	41	30.1%	14.0%
2007/2008	6	3	0	1	10	1			0	0			77	40			93	45	32.6%	15.2%
2008/2009	6	3	0	0	9	1			0	0			85	39	0	0	100	43	30.1%	13.3%
2009/2010	6	3	0	0	10	1			0	0			82	39	0	0	98	43	30.5%	14.2%
2010/2011	5	3	0	0	10	1			0	0			79	41	0	0	94	45	32.4%	13.7%
2011/2012	4	3	0	0	9	1	0	0	0	1	0	0	76	43	0	0	89	48	35.0%	13.1%
2012/2013	4	3	0	0	10	1	0	0	0	1	0	0	77	43	1	1	92	49	34.8%	13.5%
2013/2014	3	2	0	0	10	2	0	0	0	1	0	0	79	41	2	1	94	47	33.3%	12.8%

PROFESSIONAL SCHOOLS--TERM (EXCLUDES MEDICINE)

			Na	ntive			Native H	awaiian or			Two o	or More								
	B	lack	Ame	erican	As	sian	Pacific	Islander	His	panic	R	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	2	3	0	0	3	0			1	0			29	40			35	43	55.1%	11.5%
2004/2005	1	4	0	0	3	1			1	0			25	38			30	43	58.9%	13.7%
2005/2006	1	4	0	0	7	1			1	0			26	38			35	43	55.1%	17.9%
2006/2007	1	4	0	0	7	1			0	0			27	37			35	42	54.5%	16.9%
2007/2008	1	5	0	0	6	0			0	0			27	34			34	39	53.4%	16.4%
2008/2009	1	6	0	0	8	1			1	0			25	33	2	0	37	40	51.9%	22.1%
2009/2010	2	6	0	0	9	1			1	0			26	39	3	1	41	47	53.4%	21.6%
2010/2011	3	6	0	1	9	1			1	0			22	34	4	1	39	43	52.4%	25.6%
2011/2012	3	4	0	1	9	2	0	0	1	0	1	0	22	28	7	1	43	36	45.6%	26.6%
2012/2013	2	4	0	1	8	2	0	0	1	0	1	0	17	25	11	7	40	39	49.4%	24.1%
2013/2014	2	3	0	1	8	1	0	0	1	0	1	0	18	23	11	7	41	35	46.1%	22.4%

TOTAL UNIVERSITY--TENURED

			Na	tive			Native H	awaiian or			Two o	or More								
	Bl	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	aces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	15	1	0	0	45	11			12	4			633	143			705	159	18.4%	10.2%
2004/2005	17	1	0	0	46	11			13	4			637	152			713	168	19.1%	10.4%
2005/2006	17	2	0	1	46	11			13	3			641	156			717	173	19.4%	10.4%
2006/2007	17	4	0	1	47	14			14	3			641	165			719	187	20.6%	11.0%
2007/2008	20	6	0	1	53	17			15	3			651	172			739	199	21.2%	12.3%
2008/2009	22	6	0	0	53	18			16	4			665	174	1	0	757	202	21.1%	12.4%
2009/2010	21	8	1	0	57	21			17	4			670	179	1	0	767	212	21.7%	13.2%
2010/2011	20	9	1	0	59	23			17	4			673	193	2	0	772	229	22.9%	13.3%
2011/2012	18	9	1	0	62	24	1	0	19	6	0	2	666	203	5	0	772	244	24.0%	14.0%
2012/2013	18	7	1	0	59	22	1	0	18	6	0	2	653	201	41	11	791	249	23.9%	12.9%
2013/2014	18	8	1	0	67	27	1	0	17	6	0	1	689	209	31	11	824	262	24.1%	13.4%

TOTAL UNIVERSITY--TERM

			Na	ntive			Native Ha	awaiian or			Two o	r More								
	Bl	ack	Ame	erican	As	sian	Pacific	Islander	His	panic	Ra	nces	W	hite	Not A	vailable	Т	otal	%	%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Female	Minority
2003/2004	14	23	0	0	69	44			19	4			449	270			551	341	38.2%	19.4%
2004/2005	11	29	0	0	78	43			18	9			453	283			560	364	39.4%	20.3%
2005/2006	10	30	0	0	98	52			20	13			453	284			581	379	39.5%	23.2%
2006/2007	9	29	0	1	104	57			20	13			440	293			573	393	40.7%	24.1%
2007/2008	10	33	0	1	108	61			18	15			449	305			585	415	41.5%	24.6%
2008/2009	16	32	0	1	118	70			17	14			445	322	7	4	603	443	42.4%	25.6%
2009/2010	18	31	0	1	119	82			15	15			457	340	16	7	625	476	43.2%	25.5%
2010/2011	23	29	1	2	127	82			16	16			464	346	11	8	642	483	42.9%	26.3%
2011/2012	27	29	1	2	131	90	0	2	21	17	1	1	461	351	19	18	661	510	43.6%	27.5%
2012/2013	28	24	1	2	116	82	0	2	21	18	1	1	396	298	109	86	672	513	43.3%	25.0%
2013/2014	25	22	1	1	124	93	0	3	22	19	1	2	424	317	98	76	695	533	43.4%	25.5%

General Notes:

Counts are based on the location of the primary appointment. Faculty who have fully joint appointments are counted only in one school. Faculty serving as president, provosts, deans and directors of museums are excluded. Residential college masters are included.

1. "Tenured" includes tenured professors and tenured associate professors, and "tracked" faculty in Medicine and

Nursing without fixed terms.

2. "Term" includes non-tenured associate professors, assistant professors, instructors, all convertible appointments,

Gibbs Assistant Professors, Gibbs Instructors, and "tracked" faculty in Medicine and Nursing.

Notes on Race:

Starting Fall 2011, faculty were offered the opportunity to self-report their race/ethnicity using the new "two question" format, categories and wordings specified by NCES. Fall 2012 is the first year race/ethnicity is reported based entirely on self-reporting.

Two new categories were added: "Native Hawaiian or Pacific Islander" (previously counted in "Asian") and "Two or More Races".

Note, unlike NCES, this table does not include an "international" category. Faculty who are not citizens of the U.S. are reported in one of the race/ethnicity categories.

Source: Faculty Records System; 2006-07 to current HR Simplified Reporting Table OIR W105

University Faculty Tenured and Term by Gender and Ethnicity by Division Last Updated (11/04/13)

Standard 6: Students (Admissions, Fall Term)

Credit Seeking Students	Only -	Including	Continuing	Education
0		()	()	

	3 Years	2 Years	1 Year	Current
	Prior	Prior	Prior	Year*
	(FY 2011)	(FY 2012)	(FY 2013)	(FY 2014)
Freshmen - Undergraduate	<u> </u>			· · · · · · · · · · · · · · · · · · ·
Completed Applications	25,869	27,283	28,977	29,610
Applications Accepted	2,039	2,109	2,043	2,031
Applicants Enrolled	1,344	1,351	1,356	1,358
% Accepted of Applied	7.9%	7.7%	7.1%	6.9%
% Enrolled of Accepted	67.0%	65.2%	68.4%	68.2%
Percent Change Year over Year				
Completed Applications	-	5.5%	6.2%	2.2%
Applications Accepted	-	3.4%	-3.1%	-0.6%
Applicants Enrolled	-	0.5%	0.4%	0.1%
Average of Statistical Indicator of Aptitude				
of Enrollees: (Define Below)				
SAT Critical Reading	737	738	742	740
SAT Math	741	740	744	741
SAT Writing	743	744	746	744
Transfers - Undergraduate				
Completed Applications	706	1,070	973	1,013
Applications Accepted	34	29	28	31
Applications Enrolled	32	22	21	26
% Accepted of Applied	4.8%	2.7%	2.9%	3.1%
% Enrolled of Accepted	94.1%	75.9%	75.0%	83.9%
Master's Degree**				
Completed Applications	13 271	13 184	13 463	13 612
Applications Accepted	2.542	2,525	2.531	2.622
Applications Enrolled	1 284	1 260	1.307	1 402
% Accepted of Applied	19.2%	19.2%	18.8%	19.3%
% Enrolled of Accepted	50.5%	49.9%	51.6%	53.5%
First Professional Degree - M.D. and J.D.	0.040	7455	7.046	7 4 4 4
Completed Applications	8,040	/,155	/,046	/,114
Applications Accepted	519	518	511	515
Applications Enrolled	305	306	303	299
% Encolled of Accepted	0.5% 50.0%	/.2%0 50.1%	/.3%0 50.3%	/.2%0 59.10/
% Enrolled of Accepted	36.070	39.170	39.370	36.170
Doctoral Degree		,		
Completed Applications	9,247	9,310	9,539	8,899
Applications Accepted	950	1,002	1,152	1,123
Applications Enrolled	425	462	545	505
% Accepted of Applied	10.3%	10.8%	12.1%	12.6%
% Enrolled of Accepted	44.7%	46.1%	47.3%	45.0%

*"Current Year" refers to the year in which the interim report is submitted to the Commission.

** In addition to master's level students, counts also include "special students" in Divinity; certificate, special research fellows, technical interns, and special students in Drama; special students in Forestry; artist diploma and certificate students in Music; post-masters certificate students in Nursing.

Standard 6: Students (Enrollment, Fall Census Date)

		3 Years Prior	2 Years Prior	1 Year Prior	Current Year**
UNDERGRAI	Λ⊺Δ'T'F	(FY 2011)	(FY 2012)	(FY 2013)	(FY 2014)
First Year	Full-Time Headcount	1,343	1,349	1,355	1,358
	Total Headcount	1,343	1,349	1,355	1,358
	Iotal FIE*	1,343.0	1,349.0	1,355.0	1,358.0
Second Year	Full-Time Headcount	1,341	1,383	1,373	1,397
	Part-Time Headcount	1 345	1 384	1 373	1 307
	Total FTE*	1,343.0	1,383.5	1,373.0	1,397.0
Third Year	Full-Time Headcount	1,306	1,329	1,349	1,314
	Part-Time Headcount	1			
	Total Headcount	1,307	1,329	1,349	1,314
	Total FTE*	1,306.5	1,329.0	1,349.0	1,314.0
Fourth Year	Full-Time Headcount	1,289	1,261	1,302	1,334
	Total Headcount	1 289	1 261	1 302	1 334
	Total FTE*	1,289.0	1,261.0	1,302.0	1,334.0
Unclassified**	* Full-Time Headcount	3	19	14	21
	Part-Time Headcount	23	7	12	6
	Total Headcount	26	26	26	27
	Total FTE*	14.5	22.5	20.0	24.0
Total Underg	aduate Students	·			
	Full-Time Headcount	5,282	5,341	5,393	5,424
	Part-Time Headcount	28	8	12	6
	Total Headcount	5,310	5,349	5,405	5,430
% Change	FTE Undergraduate	- 5,296.0	5,345.0 0.9%	5,399.0 1.0%	5,427.0 0.5%
GRADUATE					
	Full-Time Headcount	6,251	6,353	6,347	6,503
	Part-Time Headcount	140	173	154	176
	Total Headcount	6,391	6,526	6,501	6,679
	Total FTE*	6,321.0	6,439.5	6,424.0	6,591.0
% Change	FTE Graduate	-	1.9%	-0.2%	2.6%
GRAND TOT	AL				
Grand Total I	Headcount	11,701	11,875	11,906	12,109
Grand Total I	TE	11,617.0	11,784.5	11,823.0	12,018.0
% Change	Grand Lotal FIE*	-	1.4%	0.3%	1.6%

Credit-Seeking Students Only - Including Continuing Education

*FTE: full-time counted as 1.0 FTE; part-time counted as .05 FTE

"Current Year" refers to the year in which the interim report is submitted to the Commission. *"Unclassfied" also includes all other students enrolled in credit courses.

Standard 6: Students (Financial Aid, Debt, and Developmental Courses)

Where does the institution describe the students it seeks to serve?

http://www.yale.edu/printer/bulletin/pdffiles/viewbook.pdf (undergraduates)

	3 Years Prior	2 Years Prior	Most Recently Completed Year	Current Budget*	Next Year Forward (goal)
	(FY 2011)	(FY 2012)	(FY 2013)	(FY 2014)	(FY 2015)
Student Einengiel Aid					
Total Federal Aid	\$78 203 257	\$78 610 917	\$72 320 544	\$75,601,580	\$70.081.732
Grants	\$5 325 963	\$4 841 457	\$4 611 575	\$4 507 164	\$4 732 522
Loans	\$69,865,194	\$70,809,190	\$64 782 855	\$68.021.997	\$71 423 096
Work Study	\$3 102 100	\$2,960,270	\$2 926 114	\$3,072,419	\$2 926 114
Total State Aid	\$57 659	\$45,204	\$47,780	\$50,169	\$52,677
Total Institutional Aid	\$316 901 365	\$337 602 999	\$353 292 575	\$370 957 203	\$389 505 063
Grants	\$308,400,947	\$329.241.984	\$345,704,083	\$362,989,287	\$381.139.751
Loans	\$8,500,418	\$8,361,015	\$7,588,492	\$7,967,916	\$8,366,311
Total Private Aid	\$17,301,846	\$17,674,493	\$24,060,618	\$25,686,599	\$26,970,928
Grants	\$15,430,092	\$15,726,928	\$19,099,403	\$20,477,324	\$21,501,190
Loans	\$1,871,754	\$1,947,565	\$4,961,215	\$5,209,275	\$5,469,738
Student Debt					
Percent of students graduating with debt	**				
Undergraduates	21	16	15	n/a	<15
Graduate and Professional	71%	76%	74%	n/a	approx. 74%
For students with debt:	<u></u>				
Average amount of debt for students	leaving the inst	itution with a de	gree		
Undergraduates	9,000	12,347	13,009	n/a	<13,009
Graduate and Professional	64,877	69,426	71,373	n/a	approx. 68,500
Average amount of debt for students	leaving the inst	itution without a	ı degree		
Undergraduates	n/a	n/a	n/a	n/a	n/a
Graduate Students	n/a	n/a	n/a	n/a	n/a
Cohort Default Rate	1.9	1.9	1.9	n/a	<1.9
Percent of First-year students in Develo	opmental Cour	rses***			
English as a Second/Other Language	0%	0%	0%	0%	0%

English as a Second/Other Language	0%	0%	0%	0%	0%
English (reading, writing,					
communication skills)	0%	0%	0%	0%	0%
Math	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%

*"Current Budget" refers to the year in which the interim report is submitted to the Commission.

**All students who graduated should be included in this calculation.

*** Courses for which no credit toward a degree is granted.

Standard 9: Financial Resources (Statement of Financial Position/Statement of Net Assets)

FISCAL YEAR ENDS month &day: (6/30)	2 Years Prior (FY 2011)	1 Year Prior (FY 2012)	Most Recent Year (FY 2013)	Percent Ch 2 yrs (1 yr prior) 1	nange yr (most recent)
ASSETS					
CASH AND SHORT TERM INVESTMENTS	\$416,474	\$533,002	\$289,102	28.0%	-45.8%
CASH HELD BY STATE TREASURER				-	-
DEPOSITS HELD BY STATE TREASURER				-	-
ACCOUNTS RECEIVABLE, NET	\$150,632	\$152,121	\$182,376	1.0%	19.9%
CONTRIBUTIONS RECEIVABLE, NET	\$645,354	\$467,027	\$419,456	-27.6%	-10.2%
INVENTORY AND PREPAID EXPENSES	\$29,606	\$45,654	\$49,436	54.2%	8.3%
LONG-TERM INVESTMENTS	\$20,967,020	\$20,600,346	\$22,070,662	-1.7%	7.1%
LOANS TO STUDENTS	\$63,949	\$69,858	\$74,055	9.2%	6.0%
FUNDS HELD UNDER BOND AGREEMENT				-	-
PROPERTY, PLANT AND EQUIPMENT, NET	\$4,109,839	\$4,254,728	\$4,347,257	3.5%	2.2%
OTHER ASSETS	\$85,917	\$161,365	\$162,554	87.8%	0.7%
TOTAL ASSETS	\$26,468,791	\$26,284,101	\$27,594,898	-0.7%	5.0%
LIABILITIES					
ACCOUNTS PAYABLE AND ACCRUED LIABILITIES	\$295,910	\$320.617	\$367.341	8.3%	14.6%
DEFERRED REVENUE & REFUNDABLE ADVANCES	\$90.727	\$85,262	\$89,342	-6.0%	4.8%
DUE TO STATE	n · · ·) · · · ·	⊪)	11 - · ·) - · · ·	-	-
DUE TO AFFILIATES				-	-
ANNUITY AND LIFE INCOME OBLIGATIONS	\$95,431	\$87,612	\$101,697	-8.2%	16.1%
AMOUNTS HELD ON BEHALF OF OTHERS	\$774,559	\$1,006,022	\$795,162	29.9%	-21.0%
LONG TERM DEBT	\$4.041.479	\$4,108,001	\$3,594,420	1.6%	-12.5%
REFUNDABLE GOVERNMENT ADVANCES	\$34,343	\$33,490	\$32.674	-2.5%	-2.4%
OTHER LONG-TERM LIABILITIES	\$137,839	\$151,420	\$157,379	9.9%	3.9%
TOTAL LIABILITIES	\$5,470,288	\$5,792,424	\$5,138,015	5.9%	-11.3%
NET ASSETS					
	\$3 671 365	\$3 248 912	\$3 993 165	11 5%	22.0%
	<i>\\$</i> 3,071,303	<i>\\</i> 5,270,712	<i>43,773,103</i>		
TOTAL	\$3,671,365	\$3,248,912	\$3,993,165	-11.5%	22.9%
TEMPORARILY RESTRICTED NET ASSETS	<i><i><i>vvvvvvvvvvvvv</i></i></i>	<i>+0,210,712</i>	<i><i><i><i>v</i>vvvvvvvvvvv</i></i></i>	110/0	22.07.0
INSTITUTIONAL	\$14,403,332	\$14,190,340	\$15,262,772	-1.5%	7.6%
FOUNDATION		, ,		-	-
TOTAL	\$14,403,332	\$14,190,340	\$15,262,772	-1.5%	7.6%
PERMANENTLY RESTRICTED NET ASSETS					
INSTITUTIONAL	\$2,923,806	\$3,052,425	\$3,200,946	4.4%	4.9%
FOUNDATION				-	-
TOTAL	\$2,923,806	\$3,052,425	\$3,200,946	4.4%	4.9%
TOTAL NET ASSETS	\$20,998,503	\$20,491,677	\$22,456,883	-2.4%	9.6%
TOTAL LIABILITIES AND NET ASSETS	\$26,46 8}79 1	\$26,284,101	\$27,594,898	-0.7%	5.0%

Standard 9: Financial Resources (Statement of Revenues and Expenses)

FISCAL YEAR ENDS month &day: (6/30)	3 Years Prior (FY 2011)	2 Years Prior (FY 2012)	Most Recently Completed Year (FY 2013)	Current Budget* (FY 2014)
OPERATING REVENUES				
TUITION & FEES	\$403,543	\$426,188	\$446,975	\$468,979
ROOM AND BOARD	\$63,965	\$67,537	\$71,806	\$74,532
LESS: FINANCIAL AID	(\$227,000)	(\$247,055)	(\$247,778)	(\$250,812)
NET STUDENT FEES	\$240,508	\$246,670	\$271,003	\$292,699
GOVERNMENT GRANTS & CONTRACTS	\$580,625	\$589,369	\$563,428	\$533,015
PRIVATE GIFTS, GRANTS & CONTRACTS	\$257,061	\$229,529	\$240,613	\$241,065
OTHER AUXILIARY ENTERPRISES				
ENDOWMENT INCOME USED IN OPERATIONS	\$982,637	\$990,965	\$1,018,682	\$1,045,863
OTHER REVENUE (Medical Services): OTHER REVENUE (Publications, Investment Income, Professional fees, Social Events, Parkino):	\$493,136 \$233,739	\$541,416 \$220,656	\$615,611 \$227 541	\$672,135 \$200,448
NET ASSETS RELEASED FROM RESTRICTIONS	<i>4255,157</i>	<i>4220,030</i>	φ227,5TT	<i>4200,110</i>
TOTAL OPERATING REVENUES	\$2,787,706	\$2,818,605	\$2,936,878	\$2,985,225
OPERATING EXPENSES				
INSTRUCTION	\$667,674	\$701,929	\$758,748	\$779,534
RESEARCH	\$430,651	\$428,579	\$406,406	\$394,942
PUBLIC SERVICE	\$108,008	\$109,672	\$124,894	\$106,560
ACADEMIC SUPPORT	\$187,593	\$205,712	\$225,952	\$252,773
STUDENT SERVICES	\$224,526	\$237,736	\$252,840	\$262,670
INSTITUTIONAL SUPPORT	\$163,526	\$177,031	\$154,580	\$155,671
FUNDRAISING AND ALUMNI RELATIONS	\$31,340	\$33,331	\$33,569	\$34,240
OPERATION, MAINTENANCE OF PLANT (if not allocated)	\$224,762	\$205,894	\$205,314	\$199,791
SCHOLARSHIPS & FELLOWSHIPS (Cash refunded by public institutions)				
AUXILIARY ENTERPRISES				
DEPRECIATION (if not allocated)	\$211,464	\$227,690	\$239,949	\$252,034
OTHER EXPENSES (Patient Care):	\$434,470	\$485,171	\$573,880	\$627,330
OTHER EXPENSES (specify):				
TOTAL OPERATING EXPENDITURES	\$2,684,014	\$2,812,745	\$2,976,132	\$3,065,545
CHANGE IN NET ASSETS FROM OPERATIONS	\$103,692	\$5,860	(\$39,254)	(\$80,320)
NON OPERATING REVENUES	T			
STATE APPROPRIATIONS (NET)				
INVESTMENT RETURN	\$3,465,103	\$877,883	\$2,294,825	\$1,538,002
INTEREST EXPENSE (public institutions)				
GIFTS, BEQUESTS & CONTRIBUTIONS NOT USED IN OPERATIONS	\$505,295	\$165,183	\$166,158	\$169,593
OTHER (Change in funding status of defined benefit plans):	\$266,699	(\$160,162)	\$306,850	
OTHER (Other Investment return - debt swaps, energy hedges):	\$35,290	(\$414,651)	\$202,974	
OTHER (Allocation of endowment spending to operations)	(\$982,637)	(\$990,965)	(\$1,018,682)	(\$1,045,863)
OTHER (disposal of assets, actuarial adjustments)	(\$12,447)	(\$21,961)	(\$21,602)	
	, , ,	, <i>, , , , , , , , , , , , , , , , , , </i>	, , , , , , , , , , , , , , , , , , ,	
NET NON OPERATING REVENUES	\$3,277,303	(\$544,673)	\$1,930,523	\$661,732
INCOME BEFORE OTHER REVENUES EXPENSES, GAINS, OR LOSSES	\$3,380,995	(\$538,813)	\$1,891,269	\$581,412
CAPITAL APPROPRIATIONS (public institutions)				
OTHER	\$76,769	\$31,987	\$73,937	
TOTAL INCREASE/DECREASE IN NET ASSETS	\$3,457,764	(\$506,826)	\$1,965,206	\$581,412

*"Current Budget" refers to the year in which the interim report is sub

Standard 9: Financial Resources

	(Statement of Debt)						
FISCAL YEAR ENDS month &	day (6 /30)	3 Years Prior (FY 2011)	2 Years Prior (FY 2012)	Most Recently Completed Year (FY 2013)	Current Budget* (FY 2014)		
DEBT							
BEGINNING BALAN	CE	\$4,054,534	\$4,041,479	\$4,108,001	\$3,594,420		
ADDITIONS			\$77,104		\$100,000		
REDUCTIONS		(\$13,055)	(\$10,582)	(\$513,581)	(\$107,000)		
ENDING BALANCE		\$4,041,479	\$4,108,001	\$3,594,420	\$3,587,420		
INTEREST PAID DUI YEAR	RING FISCAL	\$148,275	\$159,553	\$160,317	\$142,761		
CURRENT PORTION							
BOND RATING							
DEBT COVENANTS (PL DESCRIBE):	EASE						

(Statement of Debt)

1. Debt Covenants: (1) Describe interest rate, schedule, and structure of payments;

and (2) Indicate whether the debt convenants are being met.

Please see Yale University Audited Financial Statements for Interst rates, schedule and structure of payments. All debt covenants are being met.

2. Line(s) of credit: List the institution's line(s) of crdit and their uses.

3. Future borrowing plans (please describe).

The University issued \$250 million of debt through CHEFA in July 2014. No other debt is palnned at this time.

*"Current Budget" refers to the year in which the interim report is submitted to the Commission.

- The University must comply with covenants outlined in its various CHEFA Loan Agreements, namely:
- Principal, Interest, Premium, etc.
- Other Payments
- Covenants, Representations, etc.
- Bankruptcy, Insolvency, etc.
- Undischarged Final Judgment
- Liquidation, etc.
- Default under other agreement
- Indenture event of default
- Default with respect to other Indebtedness
- Liens, etc.
- Delay or Discontinuance

The University must comply with covenants outlined in each of the CHEFA Trust Indentures, namely:

- Payment of principal of bonds
- Payment of an installment of interest

• Any proceedings shall be instituted for the purpose of effecting a composition between the Authority and its creditors or for the purpose of adjusting the claims of such creditors, pursuant to any federal or state statue

• Any event of default on the loan agreement

The University must provide to CHEFA and the Bond Trustee letters received from PricewaterhouseCoopers (PwC) that state, as of its fiscal year end, nothing came to PwC's attention which would indicate a default or breach of any of the terms covenants or provisions of the loan agreements. The University must furnish a certificate signed by an authorized officer of the University indicating that the University has complied with all terms, provisions and conditions of the loan agreements, the tax certificate, the hazardous substance agreements and the Promissory Notes to CHEFA and the Trustee within 120 days after its fiscal year end.

Standard 9 Yale University Standby Liquidity Agreements as of June 2013

Institution	Amount
Bank of America	200,000,000
Barclays	200,000,000
JP Morgan	150,000,000
Northern Trust	200,000,000
TD Bank	150,000,000
US Bank	100,000,000
Wells Fargo (formerly Wachovia)	100,000,000

Total Line of Credit

1,100,000,000

	(Supplement	al Data)		
FISCAL YEAR ENDS month & day (6/30)	3 Years Prior (FY 2011)	2 Years Prior (FY 2012)	Most Recently Completed Year (FY 2013)	Current Budget* (FY 2014)
NET ASSETS				
NET ASSETS BEGINNING OF YEAR	\$17,540,739	\$20,998,503	\$20,491,677	\$22,456,883
TOTAL INCREASE/DECREASE IN NET ASSETS	\$3,457,764	(\$506,826)	\$1,965,206	\$581,412
NET ASSETS END OF YEAR	\$20,998,503	\$20,491,677	\$22,456,883	\$23,038,295
FINANCIAL AID SOURCE OF FUNDS				
UNRESTRICTED INSTITUTIONAL	\$191,694	\$203,095	\$204,382	\$206,183
GRANTS				
RESTRICTED FUNDS	\$35,306	\$43,960	\$43,396	\$44,629
TOTAL	\$227,000	\$247,055	\$247,778	\$250,812
% DISCOUNT OF TUITION & FEES	56.3%	58.0%	55.4%	53.5%
% UNRESTRICTED DISCOUNT	47.5%	47.7%	45.7%	44.0%

Standard 9: Financial Resources (Supplemental Data)

PLEASE INDICATE YOUR INSTITUTION'S ENDOWMENT SPENDING POLICY:

The target spending rate approved by the Yale Corporation currently stands at 5.25%. According to the smoothing rule, Endowment spending in a given year sums to 80% of the previous year's spending and 20% of the targeted long-term spending rate applied to the market value two years prior. The spending amount determined by the formula is adjusted for inflation and constrained so that the calculated rate is at least 4.5%, and not more than 6.0% of the Endowment's market value.

*"Current Budget" refers to the year in which the interim report is submitted to the Commission.

Standard 10 - Public Disclosure

10.5	Institutional mission and objectives	URL
	Yale College*	http://yalecollege.yale.edu/content/yale-college-mission
	Yale School of Nursing*	http://nursing.yale.edu/about-ysn
	Yale School of Medicine*	http://yale.edu/about/yale-school-mission-statements.pdf
	Yale School of Management*	http://som.yale.edu/yale-som-connect/contact/faq
		http://yale.edu/about/yale-school-mission-statements.pdf
	Yale Graduate Studies*	$http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html\square$
		http://yale.edu/about/yale-school-mission-statements.pdf
	Yale Law School*	http://yale.edu/about/yale-school-mission-statements.pdf
	* Mission statemens for all Yale Schools	http://www.yale.edu/about/yale-school-mission-statements.pdf
10.9	Size and characteristics of the student body	URL
	Yale College	http://yale.edu/about/facts.html
	Yale School of Nursing	http://yale.edu/about/facts.html
	Yale School of Medicine	http://yale.edu/about/facts.html
	Yale School of Management	http://yale.edu/about/facts.html
		http://som.yale.edu/our-programs/full-time-mba/student-experience/class-profile
	Yale Graduate Studies	http://yale.edu/about/facts.html
		http://www.yale.edu/graduate school/prospective/about.html
	Yale Law School	http://www.law.yale.edu/about/fastfacts.htm
10.10	Institutional goals for students' education	URL
	Yale College	http://yalecollege.yale.edu/content/academic-requirements
	Yale School of Nursing	http://nursing.yale.edu/ysn-organizing-framework-masters-and-dnp-programs
	Yale School of Medicine	http://medicine.yale.edu/about/index.aspx
		http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx
	Yale School of Management	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs
	Yale School of Management	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and
	Yale School of Management Yale Graduate Studies	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html
	Yale School of Management Yale Graduate Studies Yale Law School	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html http://www.law.yale.edu/academics/degreeprograms.htm
10.11	 Yale School of Management Yale Graduate Studies Yale Law School Total cost of education, including availability of financial aid and typical length of stay 	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html http://www.law.yale.edu/academics/degreeprograms.htm URL
10.11	 Yale School of Management Yale Graduate Studies Yale Law School Total cost of education, including availability of financial aid and typical length of stay Yale College 	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html http://www.law.yale.edu/academics/degreeprograms.htm URL http://admissions.yale.edu/financial-aid
10.11	 Yale School of Management Yale Graduate Studies Yale Law School Total cost of education, including availability of financial aid and typical length of stay Yale College Yale School of Nursing 	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html http://www.law.yale.edu/academics/degreeprograms.htm URL http://admissions.yale.edu/financial-aid http://nursing.yale.edu/tuition-special-fees-and-costs
10.11	 Yale School of Management Yale Graduate Studies Yale Law School Total cost of education, including availability of financial aid and typical length of stay Yale College Yale School of Nursing Yale School of Medicine 	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html http://www.law.yale.edu/academics/degreeprograms.htm URL http://admissions.yale.edu/financial-aid http://nursing.yale.edu/tuition-special-fees-and-costs http://medicine.yale.edu/education/finaid/index.aspx
10.11	 Yale School of Management Yale Graduate Studies Yale Law School Total cost of education, including availability of financial aid and typical length of stay Yale College Yale School of Nursing Yale School of Medicine Yale School of Management 	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html http://www.law.yale.edu/academics/degreeprograms.htm URL http://admissions.yale.edu/financial-aid http://nursing.yale.edu/tuition-special-fees-and-costs http://medicine.yale.edu/education/finaid/index.aspx http://som.yale.edu/our-programs/mba/admissions/financing-your-mba/cost-information
10.11	 Yale School of Management Yale Graduate Studies Yale Law School Total cost of education, including availability of financial aid and typical length of stay Yale College Yale School of Nursing Yale School of Medicine Yale School of Management Yale Graduate Studies 	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html http://www.law.yale.edu/academics/degreeprograms.htm URL http://admissions.yale.edu/financial-aid http://nursing.yale.edu/tuition-special-fees-and-costs http://medicine.yale.edu/education/finaid/index.aspx http://som.yale.edu/our-programs/mba/admissions/financing-your-mba/cost-information http://www.yale.edu/graduateschool/financial/index.html
10.11	 Yale School of Management Yale Graduate Studies Yale Law School Total cost of education, including availability of financial aid and typical length of stay Yale College Yale School of Nursing Yale School of Medicine Yale School of Management Yale Graduate Studies 	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html http://www.law.yale.edu/academics/degreeprograms.htm URL http://admissions.yale.edu/financial-aid http://nursing.yale.edu/tuition-special-fees-and-costs http://medicine.yale.edu/education/finaid/index.aspx http://som.yale.edu/our-programs/mba/admissions/financing-your-mba/cost-information http://www.yale.edu/graduateschool/financial/index.html http://www.yale.edu/printer/bulletin/htmlfiles/grad/financing-graduate-school.html
10.11	 Yale School of Management Yale Graduate Studies Yale Law School Total cost of education, including availability of financial aid and typical length of stay Yale College Yale School of Nursing Yale School of Medicine Yale School of Management Yale Graduate Studies Yale Law School 	http://medicine.yale.edu/education/osr/mdthesis/requirement/requirement.aspx http://som.yale.edu/our-programs http://www.yale.edu/graduateschool/academics/dissertation_students.html and http://www.yale.edu/printer/bulletin/htmlfiles/grad/the-graduate-school-of-arts-and-sciences.html http://www.law.yale.edu/academics/degreeprograms.htm URL http://admissions.yale.edu/financial-aid http://nursing.yale.edu/tuition-special-fees-and-costs http://medicine.yale.edu/education/finaid/index.aspx http://som.yale.edu/our-programs/mba/admissions/financing-your-mba/cost-information http://www.yale.edu/graduateschool/financial/index.html http://www.yale.edu/printer/bulletin/htmlfiles/grad/financing-graduate-school.html YLS - Financial Aid_http://www.law.yale.edu/admissions/Costs&FinancialAid.htm

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Standard 11: Integrity

Many university-wide policies, information about where to find published versions of them, and details about responsible offices or committees are collected at: http://www.yale.edu/about/policies.html. This page also provides access to specific policies relating to each school and division. The school-specific policies below are for Yale College and the Faculty of Arts and Sciences.

Policies	URL Where Policy Is Posted
Academic Honesty	http://yalecollege.yale.edu/campus-life/undergraduate-regulations
Intellectual Property Rights	http://ocr.yale.edu/faculty/policies
Conflict of Interest	http://coioffice.yale.edu/yale-policies-procedures
Privacy Rights	http://www.yale.edu/privacy.html
Fairness For Students	http://yalecollege.yale.edu/campus-life/undergraduate-regulations
Fairness For Faculty	http://provost.yale.edu/faculty-handbook
Fairness For Staff	http://www.yale.edu/hronline/PersPracWeb/Intro.html
Academic Freedom	http://provost.yale.edu/academic-integrity

Non-Discrimination Policies	URL Where Policy Is Posted
Recruitment and Admissions	http://www.yale.edu/equalopportunity/policies
Employment	http://www.yale.edu/equalopportunity/policies
Evaluation	http://www.yale.edu/equalopportunity/policies
Disciplinary Action	http://www.yale.edu/equalopportunity/policies
Advancement	http://www.yale.edu/equalopportunity/policies

Resolution of Grievances	URL Where Policy Is Posted
Students	http://www.yale.edu/equalopportunity/complaint/dean-student.html
Faculty	http://yalecollege.yale.edu/faculty-staff/faculty/policies-reports/university-
	grievances-procedures
Staff	http://yalecollege.yale.edu/faculty-staff/faculty/policies-reports/university-
	grievances-procedures

Appendix B1

Student Achievement (E Series) Forms

E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS - YALE COLLEGE

	(1)	(2)	(3)	(4)	(5)	(6)
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
CATEGORY	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
		(please specify)	achieved the stated outcomes for the	process?	result of using the	review (for
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?	general education
		appropriate.	review, licensure examination)	curriculum committee)		and each degree
						program)
Institutional le	evel:					
Vale	Vale College offers a liberal	Annually published in	A student working toward a	The Faculty of Arts	Curricular and	In 2011 a
Collogo:	arts aducation, one that aims	Vala Collaga Programs	hachalor's dagraa takas four or fiva	and Sciences and the	programmatic	Collogo wido
Conege.	to cultivate a broadly	of Study	courses each term and normally	Vala Collaga Doop's	changes continue	review took
	informed highly disciplined	oj siudy.	recourses each term, and normany	Office regularly	to be guided by	review took
	intollied, highly disciplined	L. the 2012 2014	receives the B.A. of B.S. degree after	Office regularly	to be guided by	place of the
	intellect without specifying in	In the 2013-2014	completing thirty-six term courses.		the 2005 report of	changes that
	advance now that intellect	edition, the description	To ashieve a halance of have deh and	aspects of	Vala Callana	were
	will be used.	of the undergraduate	To achieve a balance of breadth and		Y ale College	recommended
		curriculum can be	depth, a candidate for the bachelor's	education at Yale.	Education.	by the 2003
	Such an approach to learning	found on pages 16-21.	degree is required to fulfill		F 1 C	report of the
	regards college as a phase of		distributional requirements as well as	The Course of Study	Examples of	Committee on
	exploration, a place for the	YCPS is also posted	the requirements of a major program.	Committee considers	significant recent	Yale College
	exercise of curiosity and an	online at:		proposals for additions	changes include:	Education and
	opportunity for the discovery	catalog.yale.edu/ycps	Students fulfill disciplinary	or alterations to the	establishing more	that were
	of new interests and abilities.		requirements by taking no fewer than	curriculum submitted	writing courses in	implemented
			two course credits in the humanities	to it by departments	departments other	starting with the
	The main goal is to instill		and arts, two in the sciences, and	and programs.	than English,	Class of 2009.
	knowledge and skills that		two in the social sciences. Students		redesigning	
	students can bring to bear in		must also fulfill skills requirements	Designation of a	introductory	The Committee
	whatever work they		by taking at least two course credits	course as eligible to	STEM courses,	on Majors plans
	eventually choose.		in quantitative reasoning, two course	fulfill a distributional	and using	to work
			credits in writing, and courses to	requirement is	placement tests	annually with
	A aquiring facts is important		further their foreign language	determined by: the	and electronic	about one-fifth
	Acquiring facts is important,		proficiency.	Course of Study	portfolios to	of Yale College
	out learning now to unink			Committee (for	assess learning in	majors to
	critically and creatively in a		In all majors, the student must satisfy	Humanities and Arts	language courses.	undertake a
	variety of ways takes		a senior requirement, usually a senior	or Social Science		systematic and
	precedence.		essay, senior project, or senior	courses), the	These and other	intensive review
			departmental examination. In an	Quantitative	changes are	of how well
			intensive major, the student must	Reasoning Council,	discussed in detail	graduates
			fulfill additional requirements, such	the Science Council,	in the attached	achieve their
			as taking a prescribed seminar,	the Writing Center	report.	majors' goals.
			tutorial, or graduate course, or	Advisory Committee,	_	
			completing some other project in the	or the Language Study		
			senior year.	Committee.		

	(1)	(2)	(3)	(4)	(5)	(6)			
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most			
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program			
	-	(please specify)	achieved the stated outcomes for the	process?	result of using the	review			
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?				
		appropriate.	review, licensure examination)	curriculum committee)					
Departmental The following	Departmental Level: These departments participated in the 2013-2014 "Intensive Goals Project" which is described in the essay on Assessment, Retention, and Student Success. The following pages summarize the key findings for each participating department.								
Biomedical	Students in this major will:	There are plans to	Senior projects, transcripts, responses	The Director of	The committee	March 2014			
Engineering	- Gain a strong grounding in	publish all goals	from survey of department's 2013	Undergraduate Studies	determined that				
	the physical sciences,	collected in 2013-2014	alumni	appointed a committee	majors achieved				
	biological sciences, and	on a central website		of three professors	the goals set out				
	mathematics	accessible to the Yale		who evaluated the	by the faculty.				
	- Acquire a deep	community as well as		senior projects and	The review				
	understanding and	prospective students.		transcripts of each	process identified				
	appreciation of engineering			major who graduated	three possible				
	design principles	Current course		in May 2013. The	changes to				
	- Learn how to work in a	requirements for this		committee members	consider in the				
	laboratory situation	major can be found at:		assigned scores for	future:				
	- Have significant interaction			how well the evidence	Developing a				
	with faculty members in the	catalog.yale.edu/ycps/		demonstrated	tutoring program				
	department	subjects-of-instruction/		achievement of	for freshmen and				
	- Study one of the three	biomedical-engineering		learning outcomes.	sophomores				
	subfields of biomedical			Their findings were	interested in the				
	engineering in greater depth			summarized in a	major, introducing				
	- Complete a senior project			written report	a formal design				
				submitted to the	requirement into				
				department chair and	one or more core				
				discussed at a faculty	courses and the				
				meeting.	senior project, and				
				Ũ	organizing a				
					career day for				
					undergraduates.				

	(1)	(2)	(3)	(4)	(5)	(6)
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
		(please specify)	achieved the stated outcomes for the	process?	result of using the	review
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?	
		appropriate.	review, licensure examination)	curriculum committee)	ļ	
Chemical	Students in this major will:	There are plans to	(Will be completed after ABET	(Will be completed	(Will be	(Will be
Engineering	- Develop the ability to apply	publish all goals	review)	after ABET review)	completed after	completed after
	knowledge of mathematics,	collected in 2013-2014			ABET review)	ABET review)
	science, and engineering	on a central website				
	- Be able to design and	accessible to the Yale				
	conduct experiments, as well	community as well as				
	as analyze and interpret data	prospective students.				
	- Learn to design a system,					
	component, or process to	Current course				
	meet desired needs within	requirements for this				
	realistic constraints such as	major can be found at:				
	economic, environmental,					
	social, political, ethical,	catalog.yale.edu/ycps/				
	health and safety,	subjects-of-instruction/				
	manufacturability, and	chemical-engineering				
	sustainability					
	- Function on					
	multidisciplinary teams					
	- Learn to identify, formulate,					
	and solve engineering					
	problems using appropriate					
	techniques, skills, and					
	modern engineering tools					
	- Understand professional and					
	ethical responsibility					
	- Be able to communicate					
	effectively					
	- Obtain the broad education					
	necessary to understand the					
	impact of engineering					
	solutions in a global.					
	economic, environmental, and					
	societal context					
	- Recognize the need for and					
	have the ability to engage in					
	lifelong learning					
	- Be knowledgeable about					
	contemporary issues affecting					
	the field					

	(1)	(2)	(3)	(4)	(5)	(6)
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
	-	(please specify)	achieved the stated outcomes for the	process?	result of using the	review
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?	
		appropriate.	review, licensure examination)	curriculum committee)		
Classics	The goals listed below are for	There are plans to	Senior essays, transcripts, responses	The DUS is charged	One recent	April 2014
(five majors	the major in Classics	publish all goals	from survey of department's 2013	with the oversight of	example of the	
offered):	(Classical Civilization).	collected in 2013-2014	alumni	the different majors in	curriculum	
	Goals for the other majors are	on a central website		Classics and is assisted	committee's	
Classics	included in Appendix F.	accessible to the Yale		by a curriculum	proactive	
(Classical		community as well as		committee which	approach is the	
Civilization)	Students in this major will:	prospective students.		meets a minimum of	decision to	
	- Acquire a thorough			two times a semester	redesign the	
Classics	knowledge of the major	Current course		to review matters	compulsory Greek	
(Greek)	genres and works of ancient	requirements for this		relating to the	and Roman	
	Greek and Roman literature	major can be found at:		undergraduate	survey courses	
Classics	- Become competent at	-		curriculum, including	that are	
(Greek and	translating texts in Greek or	catalog.yale.edu/ycps/		curriculum design and	compulsory in all	
Latin)	Latin, or both (L4)	subjects-of-instruction/		innovation.	Classics majors.	
,	- Analyze works of Greek	classics			The survey	
Classics	and Roman literature in their			Each year,	courses have been	
(Latin)	cultural, political, and			subcommittees of	redesigned so that	
	historical contexts			faculty who teach in	that they are now	
Greek	- Have a sound knowledge of			Latin, Greek, and	cultural history	
(Ancient and	Greek and Roman history			Ancient History meet	courses that offer	
Modern)	- Use different media in			to ensure that they are	foundational	
,	interpreting the literature,			offering the	knowledge for	
	culture, and history of Greece			appropriate courses to	studying the	
	and Rome			cover core teaching	culture, society,	
	- Understand trends in			needs and the	history, and	
	classical scholarship			requirements of the	literature of	
	- Develop an appreciation of			majors.	ancient Greece	
	how different societies, from			5	and Rome.	
	medieval times forward, have			The review of the		
	shaped our conception of			majors was conducted		
	classical antiquity			by the DUS who		
	- Gain insight into how the			evaluated all senior		
	study of classical antiquity			essays and		
	can inform the			examinations and		
	preoccupations of the			prepared a written		
	contemporary world			report.		
	- Produce a senior project			I. T. T.		
	entailing significant original					
	research					

	(1)	(2)	(3)	(4)	(5)	(6)
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
		(please specify)	achieved the stated outcomes for the	process?	result of using the	review
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?	
		appropriate.	review, licensure examination)	curriculum committee)		
East Asian	Students in this major will:	There are plans to	Senior essays, transcripts, responses	The DUS met	The review of	March 2014
Studies	- Develop an understanding	publish all goals	from survey of department's 2013	individually with	how well senior	
	of both the region of East	collected in 2013-2014	alumni	language lectors and	essays fulfilled	
	Asia and a specific country	on a central website		all faculty members to	the desired	
	through course work in	accessible to the Yale		discuss how learning	learning outcomes	
	Chinese, Japanese, and	community as well as		goals relate to the	led the faculty to	
	Korean taught by experts	prospective students.		existing curriculum.	require future	
	who work with those			The Council on East	essays to use	
	languages	Current course		Asian Studies	Chinese,	
	- Achieve fluent and	requirements for this		appointed a committee	Japanese, or	
	spontaneous interaction with	major can be found at:		of five faculty	Korean-language	
	native speakers (L5)	5		members who	materials. The	
	- Learn to read and	catalog.vale.edu/vcps/		discussed the goals	faculty will also	
	understand complex texts in	subjects-of-instruction/		and reviewed senior	develop strategies	
	Chinese Japanese or Korean	east-asian-studies		essays of all majors	to help students	
	(1.5)			who graduated in May	distinguish the	
	Experience Chinese			2013	goals of the Fast	
	Japanese or Korean society			2013.	Asian Studies	
	through living in East Asia				major from those	
	for at least a summer				of the East Asian	
	Using original language				I anguages and	
	- Using original-language				Languages and	
	materials, complete a major				Literatures major.	
	research project that requires					
	Chinese, Japanese, or					
	Korean-language materials					

	(1)	(2)	(3)	(4)	(5)	(6)
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
		(please specify)	achieved the stated outcomes for the	process?	result of using the	review
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?	
		appropriate.	review, licensure examination)	curriculum committee)		
Economics	Students in this major will:	There are plans to	Sample of senior essays, transcripts,	A faculty committee	Most senior	July 2014
	- Learn basic economic	publish all goals	responses from survey of	read all of the essays	essays	
	principles and methods	collected in 2013-2014	department's 2013 alumni	in the sample and	demonstrate	
	through study of	on a central website		assigned scores for	achievement of	
	microeconomics,	accessible to the Yale		how well they fulfilled	the goals set for	
	macroeconomics, and	community as well as		the goals of the major.	the major. The	
	econometrics	prospective students.		Committee members'	department	
	- Be able to describe			scores were compared	acknowledged	
	economic institutions	Current course		to the grades and	that an excellent	
	underlying economic systems	requirements for this		comments given by	senior essay need	
	- Identify and analyze	major can be found at:		the students' formal	not reflect all the	
	objectives and constraints at			advisors and mentors.	learning goals, but	
	the core of an economic issue	catalog.yale.edu/ycps/			should	
	- Use equilibrium reasoning	subjects-of-instruction/			demonstrate a	
	in market or strategic settings	economics			majority of them.	
	- Explicate an economic				Also, since senior	
	problem through the use of				essay writers	
	appropriate data				work closely with	
	- Test hypotheses and isolate				an advisor,	
	economic forces using				continuing to	
	statistics and econometrics				include an outside	
	- Propose and execute a				reader is crucial to	
	sound methodology to				get an objective	
	answer a question in				evaluation.	
	economics or public policy					

	(1)	(2)	(3)	(4)	(5)	(6)
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
		(please specify)	achieved the stated outcomes for the	process?	result of using the	review
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?	
T		appropriate.	review, licensure examination)	curriculum committee)	/** **** 1	/** **** 1
Electrical	Students in this major will:	There are plans to	(Will be completed after ABET	(Will be completed	(Will be	(Will be
Engineering	- Develop the ability to apply	publish all goals	review)	after ABET review)	completed after	completed after
	knowledge of mathematics,	collected in 2013-2014			ABET review)	ABET review)
	science, and engineering	on a central website				
	- Be able to design and	accessible to the Yale				
	conduct experiments, as well	community as well as				
	as analyze and interpret data	prospective students.				
	- Learn to identify, formulate,					
	and solve engineering	Current course				
	problems using appropriate	requirements for this				
	techniques, skills, and	major can be found at:				
	modern engineering tools					
	- Be able to communicate	catalog.yale.edu/ycps/				
	effectively	subjects-of-instruction/				
		electrical-engineering				
English	Students in this major will:	There are plans to	(Department is currently completing	(Department is	(Department is	(Department is
	- Explore important works of	publish all goals	its review)	currently completing	currently	currently
	English, American, and	collected in 2013-2014		its review)	completing its	completing its
	world literatures in English	on a central website			review)	review)
	- Become familiar with a	accessible to the Yale				
	wide variety of authors,	community as well as				
	literary genres, and historical	prospective students.				
	periods					
	- Gain skills of critical and	Current course				
	historical analysis and	requirements for this				
	argument	major can be found at:				
	- Develop research skills					
	- Develop and master a style	catalog.yale.edu/ycps/				
	of elegant, felicitous, and	subjects-of-instruction/				
	persuasive critical prose	english-language-				
	- Produce a culminating	literature				
	literary-critical essay that					
	rests on substantial					
	independent work					

	(1)	(2)	(3)	(4)	(5)	(6)
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
		(please specify)	achieved the stated outcomes for the	process?	result of using the	review
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?	
		appropriate.	review, licensure examination)	curriculum committee)		
Latin	Students in this major will:	There are plans to	Senior essays, transcripts, responses	The DUS consulted	The Advisory	March 2014
American	- Become proficient in one	publish all goals	from survey of department's 2013	faculty members of the	Board expressed	
Studies	Latin American language	collected in 2013-2014	alumni. The major also maintains its	Advisory Board of the	satisfaction with	
	(Spanish or Portuguese, L4)	on a central website	own alumni database (created in	Council on Latin	the current	
	and conversant with the other	accessible to the Yale	2011) to monitor post-graduate	American and Iberian	structure of the	
	(L2)	community as well as	trends.	Studies.	major.	
	- Understand the societies	prospective students.				
	and cultures of Latin America					
	- Build an interdisciplinary	Current course				
	foundation of the region for	requirements for this				
	courses in the social sciences,	major can be found at:				
	language and literature,	-				
	history, history of art, and	catalog.yale.edu/ycps/				
	humanities	subjects-of-instruction/				
		latin-american-studies				
Linguistics	Students in this major will:	There are plans to	Senior essays, transcripts, responses	Each faculty member	Since the best	November 2013
C	- Become familiar with	publish all goals	from survey of department's 2013	in the department	essays were	
	important discoveries and	collected in 2013-2014	alumni.	reviewed all the senior	written by	
	results in linguistics	on a central website		essays, the evaluations	students who took	
	- Develop specialized	accessible to the Yale		of the essays written	a larger number of	
	knowledge in one subfield	community as well as		by advisors, and the	advanced courses	
	- Acquire methodological	prospective students.		transcripts from	in linguistics, the	
	tools needed for linguistic			majors who graduated	faculty changed	
	research	Current course		in May 2013. After	the requirements	
	- Receive training in	requirements for this		scoring the essays and	of the major to	
	hypothesis formation and	maior can be found at:		transcripts	remove the option	
	testing, in analysis, and in			individually, the	of using language	
	skills of argumentation	catalog.yale.edu/ycps/		faculty met to discuss	courses as	
	- Explore connections	subjects-of-instruction/		their findings.	electives and to	
	between linguistics and other	linguistics		6	limit the 100-level	
	fields, such as cognitive	6			courses majors	
	science, anthropology, and				can take. To bring	
	philosophy				more uniformity	
	- Conduct independent				to the evaluation	
	research and write a senior				of essays, the	
	essay in subfield				department is also	
	- Become acquainted with the				drafting a set of	
	properties of a variety of				guidelines for	
	languages other than English				faculty advisors.	

	(1)	(2)	(3)	(4)	(5)	(6)
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
		(please specify)	achieved the stated outcomes for the	process?	result of using the	review
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?	
		appropriate.	review, licensure examination)	curriculum committee)		
Mechanical	Students in this major will:	There are plans to	(Will be completed after ABET	(Will be completed	(Will be	(Will be
Engineering	- Develop the ability to apply	publish all goals	review)	after ABET review)	completed after	completed after
	knowledge of mathematics,	collected in 2013-2014			ABET review)	ABET review)
	science, and engineering	on a central website				
	- Be able to design and	accessible to the Yale				
	conduct experiments, as well	community as well as				
	as analyze and interpret data	prospective students.				
	- Learn to design a system,					
	component, or process to	Current course				
	meet desired needs within	requirements for this				
	realistic constraints such as	major can be found at:				
	economic, environmental,					
	social, political, ethical,	catalog.yale.edu/ycps/				
	health and safety,	subjects-of-instruction/				
	manufacturability, and	mechanical-engineering				
	sustainability					
	- Function on					
	multidisciplinary teams					
	- Learn to identify, formulate,					
	and solve engineering					
	problems using appropriate					
	techniques, skills, and					
	modern engineering tools					
	- Understand professional and					
	ethical responsibility					
	- Be able to communicate					
	effectively					
	- Obtain the broad education					
	necessary to understand the					
	impact of engineering					
	solutions in a global.					
	economic, environmental, and					
	societal context					
	- Recognize the need for and					
	have the ability to engage in					
	lifelong learning					
	- Be knowledgeable about					
	contemporary issues affecting					
	the field					

	(1)	(2)	(3)	(4)	(5)	(6)
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
		(please specify)	achieved the stated outcomes for the	process?	result of using the	review
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?	
		appropriate.	review, licensure examination)	curriculum committee)		
South Asian	Students in this major will:	There are plans to	Senior essays, transcripts, responses	The Executive	Since South Asian	February 2014
Studies	- Complement work in their	publish all goals	from survey of department's 2013	Committee of the	Studies is a new	
	primary major (South Asian	collected in 2013-2014	alumni	South Asian Studies	major (with only	
	Studies is a second major)	on a central website		Council appointed a	five years of	
	with a broad understanding of	accessible to the Yale		committee of three	experience), the	
	the history, culture, and	community as well as		professors. Each	review process	
	languages of South Asia (L5)	prospective students.		committee member	proved useful in	
	- Develop a working			reviewed the materials	identifying areas	
	knowledge of the region's	Current course		of all majors who	for future	
	current social, political, and	requirements for this		graduated in May	development. For	
	economic conditions	major can be found at:		2013, met to discuss	example, the	
	- Appreciate and work toward			their findings, and	committee noticed	
	attaining regional knowledge	catalog.yale.edu/ycps/		prepared a report.	that the students	
	and language skills	subjects-of-instruction/			who produced the	
		south-asian-studies			strongest senior	
					essavs found	
					faculty mentors	
					earlier in their	
					undergraduate	
					careers. As a	
					result, the DUS is	
					currently working	
					with majors to	
					begin the process	
					of selecting	
					advisors sooner.	

	(1)	(2)	(3)	(4)	(5)	(6)
MAJOD	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
		(please specify) Include URLs where	degree? (e.g. capstone course portfolio	(e.g. annually by the	data/evidence?	leview
		appropriate	review, licensure examination)	curriculum committee)	data/evidence:	
Special	Students in the major will:	There are plans to	Senior essays, transcripts, responses	A committee of two	Reviewing the	February 2014
Divisional	- In collaboration with	publish all goals	from survey of department's 2013	faculty members	senior essavs.	j
Majors	advisers, create a clear and	collected in 2013-2014	alumni	evaluated the materials	transcripts, and	
5	coherent major design in a	on a central website		of each major who	learning goals	
	field or combination of fields	accessible to the Yale		graduated in May	together raised a	
	for which there is no existing	community as well as		2013. The committee	few issues for	
	major	prospective students.		met to discuss their	future	
	- Ensure that the major has			findings and prepare a	consideration.	
	breadth and depth	Current course		written report.	The committee	
	comparable to other majors in	requirements for this		-	recommends that	
	Yale College	major can be found at:			the DUS should	
	- Establish criteria for				continue to inform	
	selecting courses and	catalog.yale.edu/ycps/			interested students	
	organize course work to	subjects-of-instruction/			of the major's	
	obtain an adequate base for	special-divisional-			particular	
	advanced study of a specific	majors			demands and risks	
	topic				(especially the	
	- Design and gain multi- or				loss of	
	interdisciplinary perspective				departmental	
	in the proposed fields of				affiliation). The	
	study				DUS should also	
	- Engage in independent				require each SDM	
	research culminating in a				senior essay	
	senior project				faculty advisor to	
					submit written	
					comments and	
					evaluations in	
					order to provide	
					more transparency	
					and better	
					understanding of	
				1	the major.	

	(1)	(2)	(3)	(4)	(5)	(6)
	Have formal learning outcomes	Where are these learning	Other than GPA, what data/evidence is	Who interprets the	What changes have	Date of most
MAJOR	been developed?	outcomes published?	used to determine that graduates have	evidence? What is the	been made as a	recent program
		(please specify)	achieved the stated outcomes for the	process?	result of using the	review
		Include URLs where	degree? (e.g., capstone course, portfolio	(e.g. annually by the	data/evidence?	
		appropriate.	review, licensure examination)	curriculum committee)		
Women's,	Students in this major will:	There are plans to	Senior essays, transcripts, responses	A committee of three	The review	March 2014
Gender, and	- Become thoroughly familiar	publish all goals	from survey of department's 2013	faculty members	process confirmed	
Sexuality	with themes, problems, and	collected in 2013-2014	alumni	reviewed the materials	that students are	
Studies	debates in the study of	on a central website		of each major who	meeting the	
	women, gender, and sexuality	accessible to the Yale		graduated in May	learning goals.	
	- Become acquainted with	community as well as		2013. Committee	Because of the	
	quantitative, qualitative, and	prospective students.		members individually	faculty's strong	
	interpretive methodologies			rated how well the	praise for the	
	used in the study of women	Current course		senior essays and	quality of the	
	gender, and sexuality	requirements for this		transcripts fulfilled the	senior essays, the	
	- Achieve proficiency in at	major can be found at:		stated learning goals	committee	
	least one methodology used	-		and met to discuss	recommends	
	in the field	catalog.yale.edu/ycps/		their evaluations. The	continuing the	
	- Understand gender and	subjects-of-instruction/		DUS prepared a	essay preparatory	
	sexuality as construed across	womens-gender-		written report	sequence. Since	
	a range of social divisions	sexuality-studies		summarizing the	the quality of	
	and historical, political, and	, i i i i i i i i i i i i i i i i i i i		findings.	student work is	
	geographical contexts			U U	strengthened by	
	- Study topics in the field				the small size of	
	from any of the disciplinary				the department.	
	approaches in the humanities				the committee	
	and social sciences				recommends that	
	- Evaluate the effects of				the faculty begin	
	political and economic events				to think about	
	on gender and sexuality				how to maintain	
	identities, expressions,				close advising and	
	aesthetic forms, and politics				curricular support	
	- Analyze gender and				for students'	
	sexuality in politics.				independent	
	medicine, law, literature.				research in order	
	film, theater, television.				to be prepared if	
	photography, digital media.				and when major	
	and the academy				enrollment	
	- Develop critical thinking				increases.	
	and effective writing skills					
	Conduct original research on					
	women gender and					
	sexuality culminating in a					
	senior essav					
	from any of the disciplinary approaches in the humanities and social sciences - Evaluate the effects of political and economic events on gender and sexuality identities, expressions, aesthetic forms, and politics - Analyze gender and sexuality in politics, medicine, law, literature, film, theater, television, photography, digital media, and the academy - Develop critical thinking and effective writing skills Conduct original research on women, gender, and sexuality, culminating in a senior essay				the department, the committee recommends that the faculty begin to think about how to maintain close advising and curricular support for students' independent research in order to be prepared if and when major enrollment increases.	

Form E1: Part B. Inventory of Specialized and Program Accreditation

 (1) Professional, specialized, State, or programmatic accreditations currently held by the institution (by agency or program name). 	(2) Date of most recent accreditation action by each listed agency.	(3) List key issues for continuing accreditation identified in accreditation action letter or report.	(4) Key performance indicators as required by agency or selected by program (licensure, board, or bar pass rates; employment rates, etc.).	(6) Date and nature of next scheduled review.
School of Architecture National Architectural Accrediting Board	2013	Conditions well met: information resources; speaking and writing skills; research skills; collaborative skills; structural systems; environmental systems; building systems integration; client role in architecture and comprehensive design; public information; non-western traditions; accessibility; and program preparation. Conditions not met: What was found to be of concern was what appeared to be a lack of planning for the transition to a new dean's tenure and failure to change the degree name for those graduating from the M. Arch. II program.		2021
School of Art		No other accreditation outside N	EASC accreditation	
Divinity School Association of Theological Schools	August 8, 2013	Report due September 1, 2015 regarding the implementation of a comprehensive plan for the assessment of educational effectiveness for all 3 degrees; and a comprehensive institutional evaluation process relating to strategic planning, budgeting, forecasting, and decision making.	N/A	Spring 2023
School of Drama		No other accreditation outside N	EASC accreditation	

(1) Professional, specialized, State, or programmatic accreditations currently held by the institution (by agency or program name).	(2) Date of most recent accreditation action by each listed agency.	(3) List key issues for continuing accreditation identified in accreditation action letter or report.	(4) Key performance indicators as required by agency or selected by program (licensure, board, or bar pass rates; employment rates, etc.).	(6) Date and nature of next scheduled review.
School of Engineering ABET, Inc. accreditation for undergraduate programs in Chemical, Electrical, and Mechanical Engineering	2012-2013	The 2012-2013 review was limited to Chemical and Electrical Engineering programs to examine the success of each program's ability to measure obtainment of Program Educational Objectives, as well as the curriculum within Chemical Engineering.	All concerns were eliminated during the review process. ABET requires all Student Outcomes to be quantitatively measured (which SEAS does) but does not specify other key performance indicators.	2014-15
School of Forestry and Environmental Studies Society of American Foresters	2003-04	No issues of concern are now noted. All criteria for continued accreditation are met.	 Performance indicators and standards for general accreditation for the MF include evaluations of the following: Standard 1: Forestry Program Mission, Goals, and Objectives Standard 2: Curriculum General Education: a. Communications b. Science and Mathematics c. Social Sciences and Humanities d. Computer Literacy Professional Education: a. Ecology and Biology b. Measurement of Forest Resources c. Management of Forest Resources d. Forest Resource Policy, Economics, and Administration; Distance Learning. 	2014
(1) Professional, specialized, State, or programmatic accreditations currently held by the institution (by agency or program name).	(2) Date of most recent accreditation action by each listed agency.	(3) List key issues for continuing accreditation identified in accreditation action letter or report.	(4) Key performance indicators as required by agency or selected by program (licensure, board, or bar pass rates; employment rates, etc.).	(6) Date and nature of next scheduled review.
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School of Forestry and Environmental Studies - continued			Standard 3: Forestry ProgramOrganization and AdministrationAdministrator; Student Recruitment,Admissions and Transfers; Teaching;Administrative Support; and ProgramPlanning and Outcomes Assessment.Standard 4: FacultyAcademic and Professional Competency;Teaching Skills.Standard 5: StudentsRecruitment and Retention; Advising.Standard 6: Parent Institution SupportForestry Program Support; SupportingPrograms; and Physical Resources andFacilities.	
School of Law American Bar Association	2011	The Executive Committee determined that the school complies with the obligations of membership. The 2011 site team concluded that Yale Law School "is one of the premier Law Schools in the country"	N/A	2018
School of Management AACSB International	9 / 09	 An outstanding faculty. Outstanding momentum based on the launch of its innovative curriculum. Focus on a small number of programs, primarily the full-time MBA, which is small scale and very high caliber. A tremendous endowment measured by any yardstick, and clearly one of largest per capita of any top business school. 		2014

	1			
 (1) Professional, specialized, State, or programmatic accreditations currently held by the institution (by agency or program name). 	(2) Date of most recent accreditation action by each listed agency.	(3) List key issues for continuing accreditation identified in accreditation action letter or report.	(4) Key performance indicators as required by agency or selected by program (licensure, board, or bar pass rates; employment rates, etc.).	(6) Date and nature of next scheduled review.
School of Management - continued		5. Alumni development and support that is outstanding for such a young school. Clearly, participating in alumni development among the greater Yale University alumni is of immense importance to the School.		
School of Medicine American Medical Association Association of American Medical Colleges Liaison Committee on Medical Education	10-22-13	 The LCME determined that the medical education program is in compliance with the following accreditation standards, but that ongoing monitoring is required to ensure continued compliance: A. IS-1 (<i>strategic planning</i>) An institution that offers a medical education program must engage in a planning process that sets the direction for its program and results in measurable outcomes. B. ED-30 (<i>formative and summative assessment</i>) The directors of all courses and clerkship rotations in a medical education program must design and implement a system of fair and timely formative and summative assessment of medical student achievement in each course and clerkship rotation. C. ER-5 (<i>adequate security systems</i>) A medical education program should have security systems in place at all instructional sites and published policies and procedures that address emergency and disaster preparedness. 	 A. IS-1 (strategic planning) 1. Clearly define the outcome measures and timelines the school is using to determine if it is achieving the objectives of the strategic plan for medical education. 2. Provide updates on outcomes that have not been achieved to date. 3. Provide updates on the implementation of the new curriculum and the timeline. B. ED-30 (formative and summative assessment) 1. Provide the average number of days for students to receive final clerkship grades. 2. List any clerkships that are significant outliers and describe the steps taken to assure timely submission of clerkship grades. C. ER-5 (adequate security systems) 1. Provide an update on student awareness of the Bulldog Mobile Program (Rave Guardian System) and its utilization. 2. Using data from a student survey or 	
	l	l	2. Osing data nom a student survey of	

(1) Professional, specialized, State, or programmatic accreditations currently held by the institution (by agency or program name).	(2) Date of most recent accreditation action by each listed agency.	(3) List key issues for continuing accreditation identified in accreditation action letter or report.	(4) Key performance indicators as required by agency or selected by program (licensure, board, or bar pass rates; employment rates, etc.).	(6) Date and nature of next scheduled review.
School of Medicine - continued			focus group, provide an update on student perceptions of their personal safety on the New Haven Campus. Describe the steps being taken to assure student safety and improve student perceptions of safety on the New Haven Campus.	
School of Music		No other accreditation outside N	EASC accreditation	
School of Nursing				
Commission on Collegiate Nursing Education	2009			2019
American College of Nurse Midwives	2010			2019
Connecticut State Board of Nurse Examiners	2009			2014
Pediatric Nursing Certification Board	2008			Approval process no longer exists
School of Public Health Council on Education for Public Health	July 2007	Submission of Spring 2008 and Spring 2009 Interim Reports on the following key issues: Learning objectives, joint degree curriculum, independent organizational functioning, MPH internship policies, recruitment/retention of diverse faculty complement	None	February 2014 – Site Visit

(2) Where are the claims (3) Other than course completion and grades, (4) Who interprets the (1) What are the claims for (5) What changes are student achievement or published? (please what outcomes evidence is used to support the evidence? What is the anticipated in the claims or the evidence? student success? specify) claims? process? A "2-4 Project" report in The purpose of the Graduate The Graduate School's The Graduate School's web site contains The Academic Deans of the School is to educate students in 2006 and "Improving **Programs and Policies** extensive data about our programs to help Graduate School have led current and prospective students make Graduate Education" in 2011 research, scholarship and teaching bulletin (print and on these evaluations of graduate http://www.yale.edu/grad informed decisions about career and personal programs and have worked facilitated a highly productive in the arts and sciences. Graduate uateschool/) includes students study advanced material opportunities. A page titled "Departments and with the Directors of exchange of best practices Programs" directs the reader to an annuallyamong departments. Both in disciplinary or interdisciplinary information about all of Graduate Studies and Chairs fields, and under the guidance of updated statistical profile featuring admissions our programs. to help each program reports met some inaction and faculty mentors they generate new data, total enrollment, time to degree and improve their management resistance, but most programs Graduate School's and mentoring. The Dean's knowledge and ideas through took the recommendations career placement data for each program, each Viewbook (available on research. They learn to disseminate division (i.e., humanities, social sciences, Faculty Advisory Committee seriously and implemented the GSAS web site) this knowledge in scholarly natural sciences) and the Graduate School reviews data and improvements that benefit contains anecdotal publications and teaching. Their overall. The range of statistics is among the departmental reports on a their students according to remarks by both faculty education equips Yale's graduate follow up surveys in 2012 most extensive for graduate schools in the US. regular basis. Representatives and students concerning students for leadership roles in of the Graduate Student and 2013. The value of some The project, "Improving Graduate Education graduate study, strong colleges and universities, research Assembly (student practices is obvious, such as mentoring relationships at Yale" in 2011 laboratories, government, the government) and Directors of assuring every student of an (http://www.yale.edu/graduateschool/academi and opportunities for annual dissertation committee nonprofit sector and private Graduate Studies from all student achievement at cs/improvingeducation.html) found a strong industry. with written feedback. Other programs meet regularly with correlation between good management and Yale GSAS. the deans to exchange suggestions, such as faculty mentoring practices and outcomes (fraction of The emphasis on the production of The Graduate School information. A website for holding weekly research new knowledge and training for students completing a dissertation, time to Newsletter graduate programs enables group meetings with all of degree and late attrition). The report the professional academic (http://www.yale.edu/grad them to report on their their students will require recommended that all programs adopt the activities of scholarly writing and uateschool/publications/n changes in traditions in some progress in dealing with teaching clearly distinguishes the practices used by the most successful ews/index.html) features fields. In the long run, the concerns. goals of graduate study from those programs and considerable progress has been current research by quality of mentoring and of undergraduate education. The made. A 2012 survey of current doctoral faculty, students and program structure will be passage also indicates that students revealed further local opportunities alumni, highlighting used as two of several criteria graduate students find a broad for improvement, which each program is awards, publications and for adjusting the sizes of range of applications beyond currently discussing with their students. In other professional graduate programs. academe for the skills and habits of 2013 the programs helped us locate most of recognition they have their graduates since 2000 to provide better mind that they acquire at Yale. achieved. data on career outcomes.

FORM E3. CLAIMS FOR STUDENT ACHIEVEMENT - GRADUATE SCHOOL OF ARTS AND SCIENCES

Appendix B2

Student Success (S Series) Forms

Form S1. Retention and Graduation Rates

			Most Recent
Student Success Measures/	2 Years Prior	1 Year Prior	Year
Prior Performance and Goals	2011-12	2012-13	2013-14
1. <u>Retention Data</u> (IPEDS)			
Entering	- Fall <u>2010</u>	<u>2011</u>	<u>2012</u>
Bachelors degree	students: 99%	99%	99%

IPEDS Freshmen Retention Rates (found in IPEDS Fall Enrollment Surveys, Part E):

Note: The retention rate for all years listed is for entering freshman returning as sophomores following fall. Example, students who entered as freshmen in fall 2010 and returned for their sophomore year fall 2011.

2. Graduation Rates Da	<u>ta</u> (IPEDS)			
Entering Coho	rt Year - Fall:	2005	2006	2007
Gra	aduation year:	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>
Bachelors d	egree students	97%	96%	98%
Undergraduate 6-Year Gradu	ation Rates by G	Gender and Ra	ace/Ethnicity:	
Men: Nonresident alien		90%	93%	95%
Black, non-Hispan	ic	94%	91%	97%
American Indian/A	Alaska Native	0%	100%	100
Asian/Pacific Islan	ıder	97%	98%	96%
Hispanic		93%	92%	94%
White, non-Hispar	nic	97%	97%	98%
Two or more races		91%	96%	94%
Race/Ethnicity Un	known	95%	96%	100%
	Total Men:	96%	96%	97%
Women: Nonresident alien		98%	97%	98%
Black, non-Hispan	ic	96%	95%	98%
American Indian/A	Alaska Native	100%	50%	100%
Asian/Pacific Islan	ıder	100%	97%	100%
Hispanic		95%	95%	99%
White, non-Hispar	nic	98%	97%	99%
Two or more races		97%	97%	100%
Race/Ethnicity Un	known	99%	98%	91%
,	Total Women:	98%	96%	99%

Graduate School of Arts & Sciences:

<u>Median years to Ph.D.</u> Terminal Masters and Ph.D. Degrees by Department and Program

Links to IPEDS Graduation Rates Surveys for Yale University:

IPEDS Graduation Rates 2008-09 IPEDS Graduation Rates 2009-10 IPEDS Graduation Rates 2010-11 IPEDS Graduation Rates 2011-12 IPEDS Graduation Rates 2012-13

OIR (6/11/14) B Waters

Fall, 2011 Fall, 2012 Fall, 2013

Form S-2. Other Measures of Student Achievement and Success

1.a. Success of students pursuing higher degrees: Selected results from the 2013 COFHE Alumni Survey

In spring of 2013, a survey was sent to members of the Yale College graduating classes of 1969, 1979, 1989, and 2002. The survey was developed by the Consortium on Financing Higher Education (COFHE) with direct input from Yale in its design. The overall survey response rate was 41%.





1.b. Yale College Applicants and Acceptances to Professional Schools

	Medical School**			
	Class 2011	Class 2012	Class 2013	Class 2014
Applicants:	156	174	170	187*
Acceptances:	140	153	140	

* The 187 number is approximate; final counts will be available in January, 2015.

**These include students applying in senior year, as alumni, and reapplicants to both medical and dental programs (M.D. and D.O.)

	Law School			
	2010-11	2011-12	2012-13	2013-14
Graduating Students:	83	56	43	30
Alumni:	291	267	196	185
<u>Average #</u>				
Graduating Students:	3.86	3.39	4.67	5.23
Alumni:	3.38	2.62	4.47	3.69

2.a. # of Yale College students from the Class of 2013 who pursued mission-related paths:

Teach for America: 21 Source: Undergraduate Career Services "First Destination Survey" of the Class of 2013. The survey response rate was 83%.

2.b. Selected results from the 2013 COFHE Alumni Survey (survey details are given above).

The following reports the percentage of alumni by employment sector, including non-profit organizations:



3. Rates at which students are successful in fields for which they are not explicitly prepared:

These results are also taken from the 2013 Alumni Survey. Alumni across all four classes (1969, 1979, 1989, and 2002) were equally likely to pursue careers that related to their majors (49%) as not (51%) - Chart A. Alumni felt that Yale had prepared them "very well" or "more than adequately" (76%) for their career - Chart B.

Chart A Chart B well did Yale prepare you for your current Is your current position related to How career your undergraduate field(s) of 60% 1969 study? 60% 1979 Yes, same 40% 1989 50% field as 2002 major(s) 40% 20% Yes, 30% related to major(s) 20% No. not 10% related 0%

4. Documented Success of Graduates Achieving Other Mission-Explicit Achievement "Project Prominence" -- Alumni

Alumni in Non-Profits Alumni in the Environment Alumni in Law Alumni as Law Partners Alumni in Religion Alumni in Domestic Government American Alumni in Foreign Government Non-American Alumni in Foreign Government Alumni in Journalism Alumni in Technology

Definition and methodology explanations:

Between October 2006 and May 2008, information was collected by the Office of Development and Alumni Affairs on "prominent" Yale graduates. The information collected is reported here broken out by category or area of prominence.

5. Other (Specify)

- 1 Dwight Hall Center for Public Service and Social Justice:
- The goal of Dwight Hall is: "to foster civic-minded student leaders and to promote service and activitism in New Haven and around the world." 2 National Awards to Students

The number of undergraduates receiving Rhodes, Marshall, Fulbright, Truman, and Goldwater Scholarships from 1976-77 to 2013-14.

3 NCAA Public Recognition Award: Yale had 14 teams honored by the NCAA with Public Recognition Awards for their latest multi-year Academic Progress Rate (APR) scores. (June 5, 2013)

Form S3. Licensure Passage Rates

School of Architecture

A two-year period of practical training in an architecture firm prior to taking the exam is required. The School has no part of this and does not track licensing.

School of Art

The School has no information on licensure.

Divinity School

The School has no information on licensure.

School of Drama

The School has no information on licensure.

School of Forestry and Environmental Studies

The School has no information on licensure.

School of Law

	<u>3 Years</u> <u>Prior</u>	<u>2 Years</u> <u>Prior</u>	<u>1 Year</u> Prior	Most Recent Year (2012)	<u>Goal for</u> 2013
State Licensure Passage Rates					
New York Bar	91/96	99/102	105/109	118/125	103/108
	94.79%	97.06%	96.33%	94.40%	95.37%
California State Bar	42/42	24/24	27/32	28/31	30/32
	100.00%	100.00%	84.38%	90.32%	93.75%

School of Management

The School has no information on licensure.

School of Medicine

USMLE Results (compiled 12/5/13)

Step 1 # of Yale Yale Passing Yale Mean National Year National Examinees **Rate (%)** Score Passing Mean **Rate** (%) Score 2008 94 97 93 221 237 2009 93 103 96 232 221 2010 98 93 236 91 222 2011 102 96 94 224 236 97 227 2012 102 239 95

Note: These data are reported by calendar year.

Step 2 CK

Year	# of Yale Examinees	Yale Passing Rate (%)	Yale Mean Score	National Passing Rate (%)	National Mean Score
2008-09	103	96	232	96	229
2009-10	102	95	231	97	230
2010-11	96	97	232	97	233
2011-12	102	97	238	98	237
2012-13	104	97	242	98	238

Note: These data are reported by academic year.

Step 2 CS

Year	# of Yale Examinees	Yale Passing Rate (%)	National Passing Rate (%)
2008-09	102	99	97
2009-10	106	100	97
2010-11	97	98	98
2011-12	96	99	97
2012-13	106	98	98

Note: These data are reported by academic year.

School of Medicine - continued

Step 3			
Year	# of Yale Examinees	Yale Passing Rate (%)	National Passing Rate (%)
2006	97	98	96
2007	83	99	95
2008	94	96	95
2009	86	97	96
2010	90	99	97

Note: These data are reported by graduating yearevery June an update is posted for each graduating year. The data for 2010 are the latest available.

School of Management

The School has no information on licensure.

School of Music

The School has no information on licensure.

School of Nursing

	<u>3 Years</u> <u>Prior</u>	<u>2 Years</u> <u>Prior</u>	<u>1 Year</u> <u>Prior</u>	Most Recent Year (2012)
National Council Licensure Examinations				
Passage Rates	95%	94%	95%	100%

School of Public Health

The School has no information on licensure.

Form S3. Job Placement Rates

School of Architecture

The School does not collect this information

School of Art

The School does not collect detailed data, however a significant majority of School of Art alumni earn their living in the discipline in which they were trained or in a related field.

Alumni are among the most accomplished and honored professionals in the field. Alumni of Yale School of Art are regularly recipients of many prestigious grants and awards, including: Leonore Annenberg Fellowships, John D. and Catherine T. MacArthur Foundation Fellowships, John Simon Guggenheim Memorial Foundation Fellowships, Louis Comfort Tiffany Foundation Fellowships, National Endowment for the Arts Fellowships, American Academy of Arts and Letters Awards, Rome Prizes, Terra Foundation Giverny Fellowships, Toby Devan Lewis Fellowships, Tierney Foundation Fellowships, Cartier Awards, Contemporary Arts Foundation Grants, Gottlieb Foundation Grants, American Institute of Graphic Arts awards, Kresge Foundation Artist Fellowships, Joan Mitchell Foundation Grants, Pollock-Krasner Foundation Grants, New York Foundation for the Arts Grants, Altoid Biennial Prizes, Grange Prizes, Smithsonian Lucelia Artist Awards, and United States Artists Fellowships among others.

The following are various positions held by graduates of the School of Art:

Art Consultant, Artist, Art/Creative Director, Art Teacher, Auction House staff, Author, Business owner, College/University Professor, Communications Specialist, Curator, Fabricator, Fashion Designer, Film-maker, Designer, Photographer, Furniture maker, Gallerist, Gallery Assistant, Graphic Designer, Interior Designer, Magazine staff, Media Specialist, Museum Educator, Painter, Photographer, Printer, Printmaker, Production company owner, Publication staff, Publisher, Set designer, Sculptor, Studio, Assistant, Woodworker, Writer

Divinity School	<u>2010</u>	2011	2012	<u>2013</u>
Master of Divinity				
Employed in field	71%	70%	62%	79%
Employed outside field	4%	5%	0%	6%
Continued education	21%	18%	28%	10%
Master of Arts in Religion				
Employed in field	44%	38%	41%	33%
Employed outside field	15%	11%	6%	18%
Continued education	36%	32%	40%	32%
Master of Sacred Theology				
Employed in field	50%	71%	66%	73%
Employed outside field	0%	0%	11%	0%
Continued education	42%	14%	22%	18%

School of Drama

The School does not collect detailed data, however surveys indicate that 78% of recent School of Drama alumni (i.e., those within 10 years of graduation) earn their living in the discipline in which they were trained or in a related field. It is important to note that conventional employment data do not convey a complete picture of the professional lives of our alumni, since the nature of the theatre industry is that a significant proportion of individual artists work on a freelance basis. Of the recent alumni working in theatre or related fields, approximately two-thirds are

employed full-time and one-third are engaged in part-time or freelance work. The most common fields in which graduates are employed are, in order of frequency: theatre, teaching, television/film, and other live performing arts.

Alumni of the School of Drama are amongst the most accomplished and honored professionals in the field. In the past decade alone, alumni have been nominated for 106 Tony Awards; 85 Emmy Awards; 78 Lucille Lortel Awards; 101 Drama Desk Awards; 12 Academy Awards; 29 Screen Actors Guild Awards, and 30 Golden Globe Awards.

School of Forestry and Environmental Studies	<u>2010</u>	2011	<u>2012</u>
Master of Environmental Management			
Private (Business / Law)	9%	20%	12%
Consulting	17%	10%	14%
Not-for-profit	17%	23%	24%
Government / Public sector	21%	15%	15%
Entrepreneur	na	3%	1%
Academic	15%	14%	10%
Education - Further Study	8%	10%	14%
Seeking Employment	10%	5%	6%
Unknown	4%	2%	5%
Consulting	20%	12%	20%
Not-for-profit	17%	23%	22%
Government / Public sector	20%	16%	16%
Entrepreneur	0%	1%	1%
Academic	12%	14%	10%
Education - Further Study	1%	4%	5%
Seeking Employment	12%	4%	8%
Unknown	6%	1%	1%
Master of Forestry			
Private (Business / Law)	15%	17%	0%
Consulting	0%	8%	0%
Not-for-profit	15%	25%	8%
Government / Public sector	31%	25%	17%
Entrepreneur	0%	0%	8%
Academic	31%	17%	25%
Education - Further Study	8%	0%	25%
Seeking Employment	0%	8%	8%
Unknown	0%	0%	8%
Master of Forest Science			
Private (Business / Law)	10%	20%	0%
Consulting	20%	20%	0%
Not-for-profit	10%	20%	27%
Government / Public sector	20%	20%	18%
Entrepreneur	10%	0%	0%
Academic	0%	0%	0%
Education - Further Study	20%	0%	27%
Seeking Employment	10%	20%	9%
Unknown	10%	0%	18%

School of Law	<u>2010</u>	<u>2011</u>	2012	2013
Employed - Bar Passage Required	94%	87%	89%	82%
Employed - JD Advantage	3%	3%	4%	9%
Employed - Professional	0%	1%	2%	3%
Employed - Non Professional	0%	0%	0%	0%
Education - Further Study	3%	4%	3%	2%
Unemployed - Deferred Employment	0%	0%	0%	1%
Unemployed - Seeking Employment	1%	2%	0%	0%
Not Seeking Employment	1%	1%	0%	0%
Unknown	0%	0%	0%	1%
School of Management	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Employed	92%	94%	89%	91%

School of Medicine

Of the 101 students who were awarded a Doctor of Medicine degree from Yale School of Medicine in 2012, 99 matched into residence programs in locations across the United States and Canada. Two students chose alternative careers.

School of Music

The School does not collect this information

School of Nursing

The School does not collect this information

School of Public Health	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Master of Public Health				
Employed	84%	82%	85%	88%

Yale Graduate School: Total and By Division

Total

Ph.D. Admissions Data - Fall 2013 Enter	ing Class		
Number of applicants	g	018	
Number of students enrolled	461		
Ph.D. Degree Information			
Number of registered students, Fall 2013	2	2646	
Number of degrees awarded 2012-2013		383	
Median years to Ph.D.		6.3	
Percent of students awarded Ph.D.	-	78%	
Notes: Median years to Ph.D. for degrees awarded in 2003-04 thru	2012-13. Calc	ulated from first	
enrollment to degree conferral date in May or December. Percent c students who entered the Graduate School from Fall 1999 thru Fall	of students awa I 2003.	rded Ph.D. for	
Reported Career Data			
Initial Position at Time of Dissertation Su	bmission		
	Number	Percent	
Faculty	747	23%	
Postdoctoral position	1050	32%	
Non-academic position	419	13%	
Not yet employed and seeking	960	29%	
Not seeking employment	130	4%	
Total responses to survey	3306		
No data available	139		
Ph.D.s awarded (2003-04 thru 2012-13)	3445		
Notes: These data are collected at the time the dissertation is submitted to the Graduate School. This can be several months or more prior to Commencement. Actual percentage obtaining employment may be higher.			
Position Held Five Years After Gradu	ation		
	Number	Percent	
Faculty	1118	54%	
Postdoctoral position	239	12%	
Non-academic position	629	30%	
Seeking employment	28	1%	
Not seeking employment	51	2%	
Total responses to survey	2065		
No data available	1054		
Ph.D.s awarded (1998-99 thru 2007-08)	3119		

Humanities Division

Ph.D. Admissions Data - Fall 2013 Entering Class			
Number of applicants	2	2377	
Number of students enrolled	105		
Ph.D. Degree Information			
Number of registered students, Fall 2013		713	
Number of degrees awarded 2012-2013		100	
Median years to Ph.D.		67	
Percent of students awarded Ph.D.		71%	
Notes: Median years to Ph.D. for degrees awarded in 2003-04 thru	2012-13. Calc	ulated from first	
enrollment to degree conferral date in May or December. Percent c students who entered the Graduate School from Fall 1999 thru Fal	of students awa I 2003.	rded Ph.D. for	
Reported Career Data			
Initial Position at Time of Dissertation Su	bmission		
	N	%	
Faculty	396	44%	
Postdoctoral position	111	12%	
Non-academic position	55	6%	
Not employed and seeking	313	35%	
Not seeking employment	32	4%	
Iotal Responses to Survey	907		
No data available	18		
Ph.D.s awarded (2003-04 thru 2012-13)	925		
Notes: These data are collected at the time the dissertation is submitted to the Graduate School. This can be several months or more prior to Commencement. Actual percentage obtaining employment may be higher.			
Position Held Five Years After Gradu	ation		
	N	%	
Faculty	500	76%	
Postdoctoral position	14	2%	
Non-academic position	114	17%	
Seeking employment	12	2%	
Not seeking employment	18	3%	
Total Responses to Survey	658		
No data available	247		
Ph.D.s awarded (1998-99 thru 2007-08)	905		

Social Sciences Division

Ph.D. Admissions Data - Fall 2013 Entering Class			
Number of applicants	3	3127	
Number of students enrolled	106		
Ph.D. Degree Information			
Number of registered students, Fall 2013		528	
Number of degrees awarded 2012-2013		70	
Median years to Ph.D.		5.7	
Percent of students awarded Ph.D.		78%	
Notes: Median years to Ph.D. for degrees awarded in 2003-04 thru	2012-13. Calc	ulated from first	
enrollment to degree conferral date in May or December. Percent of	of students awa	rded Ph.D. for	
students who entered the Graduate School from Fall 1999 thru Fall	2003.		
Reported Career Data			
Initial Position at Time of Dissertation Su	bmission		
	Number	Percent	
Faculty	266	40%	
Postdoctoral position	134	20%	
Non-academic position	96	15%	
Not yet employed and seeking	147	22%	
Not seeking employment	15	2%	
Total Responses to Survey	658		
No data available	16		
Ph.D.s awarded (2003-04 thru 2012-13)	674		
Notes: These data are collected at the time the dissertation is submitted to the Graduate School. This can be several months or more prior to Commencement. Actual percentage obtaining employment may be higher.			
Position Held Five Years After Gradu	ation		
	Number	Percent	
Faculty	281	67%	
Postdoctoral position	14	3%	
Non-academic position	107	26%	
Seeking employment	3	1%	
Not seeking employment	12	3%	
Total Responses to Survey	417		
No data available	222		
Ph.D.s awarded (1998-99 thru 2007-08)	639		

Natural Sciences Division

Ph.D. Admissions Data - Fall 2013 Entering Class			
Number of applicants	3	3514	
Number of students enrolled	250		
Ph.D. Degree Information			
Number of registered students, Fall 2013		405	
Number of degrees awarded 2012-2013		213	
Median years to Ph.D.	i i	5.7	
Percent of students awarded Ph.D.		32%	
Notes: Median years to Ph.D. for degrees awarded in 2003-04 thro	u 2012-13. Calc	ulated from first	
enrollment to degree conferral date in May or December. Percent	of students awa	rded Ph.D. for	
students who entered the Graduate School from Fall 1999 thru Fa	II 2003.		
Reported Career Data			
Initial Position at Time of Dissertation Su	ubmission		
	Number	Percent	
Faculty	118	7%	
Postdoctoral position	811	45%	
Non-academic position	268	15%	
Not yet employed and seeking	529	29%	
Not seeking employment	86	5%	
Total Responses to Survey	1812		
No data available	34		
Ph.D.s awarded (2003-04 thru 2012-13)	1846		
Notes: These data are collected at the time the dissertation is sub-	mitted to the Gra	aduate School.	
This can be several months or more prior to Commencement. Actu	ual percentage of	obtaining	
employment may be higher.			
Position Hold Five Years After Grad	uation		
	Number	Percent	
Faculty	305	32%	
Postdoctoral position	211	22%	
Non-academic position	404	42%	
Seeking employment	13	1%	
Not seeking employment	20	2%	
Total Responses to Survey	953		
No data available	620		
Ph.D.s awarded (1998-99 thru 2007-08)	1573		

Appendix C

Yale College by the Numbers



Yale University is a major research institution comprising Yale College, the Graduate School of Arts and Sciences, and ten professional schools and programs. Complementing the schools are a wide array of arts, cultural, and athletic programs and facilities, including one of the world's most extensive library systems and three major museums: the Yale University Art Gallery, the Yale Center for British Art, and the Peabody Museum of Natural History. This summary addresses some frequently asked statistical questions about Yale, with a focus on Yale College. Only a subset of Yale's resources is represented here. Also see the Factsheet and the Office of Institutional Research website for more information.

YALE COLLEGE IN THE CONTEXT OF THE UNIVERSITY

Enro	Enrollment (Fall 2013)				
	Male	Female	Total	% International*	
Yale College:					
Full-time Degree Seeking	2,738	2,671	5,409	11%	
Special (Degree and Non-Degree)	15	6	21	10%	
Graduate School of Arts & Sciences	1,520	1,340	2,860	33%	
Professional Schools and Programs:					
Architecture	119	81	200	30%	
Art	60	66	126	21%	
Divinity	183	156	339	7%	
Institute of Sacred Music	18	16	34	9%	
Drama	105	105	210	13%	
Engineering	Enrollme	nts include	d in Yale Col	llege and	
	the Gradu	uate Schoo	l of Arts and	Sciences	
Forestry & Environmental Studies	119	182	301	22%	
Law	385	312	697	14%	
Management	390	225	615	33%	
Medicine	238	208	446	12%	
Physician Associate Program	32	68	100	2%	
Public Health	61	160	221	22%	
Music	111	76	187	44%	
Institute of Sacred Music	22	6	28	14%	
Nursing	32	283	315	4%	
Total Professional Schools	1,875	1,944	3,819	19%	
Total University	6.148	5.961	12,109	18%	

*International includes anyone who is neither a U.S. citizen nor a permanent resident.

Source: Office of Institutional Research

Degrees Conferred (Between July 1, 2012 and June 30, 2013)

Bachelors	1,308
Graduate/Professional	2,808
Total	4,116
For more information on degrees conferred, click here	

University Enrollments (Fall 2013) (U.S. Citizens and Permanent Residents)*

	Yale College	Graduate/ Professional	Total University
Black or African American	9%	4%	8%
American Indian/Alaska Native	2%	1%	2%
Asian	20%	13%	17%
Native Hawaiian or			
Other Pacific Islander	<1%	<1%	<1%
Hispanic of Any Race	10%	6%	8%
White	57%	70%	62%
Race/Ethnicity Unknown	2%	6%	3%

*Students self-reporting two or more races are counted once in each race/ethnicity category.

Source: Office of Institutional Research

Freshmen Class Statistics (Fall 2013)

55% of matriculants attended public high schools 45% of matriculants attended independent, parochial, and other schools 14% of matriculants are children of Yale alumni 12% of matriculants reside abroad 6% of matriculants reside in Connecticut 82% of matriculants reside elsewhere in the U.S. Source: Class of 2017 Freshmen Profile

Yale College Class of 2017 (Entering Fall 2013)

Total Applicants: 29,610	Total Admitted: 2,031	Admit Rate: 6.9%	Total Matriculants: 1,359

Academic Profile (Entering Fall 2013)

Percent of		Percent of
Applicants	Admit Rate	Admitted Class

High School Rank in Class

(Represents data for 41% of applicants and 30% of admitted Students)

Top 5%	68%	7%	91%
6% - 10%	15%	2%	6%
11% - 20%	10%	1%	2%
21% and below	7%	1%	1%

SAT Critical Reading Scores

(Represents data for 74% of applicants and 81% of admitted Students)

800	16%	16%	34%
700 - 790	42%	9%	49%
600 - 690	30%	4%	16%
Below 600	12%	1%	1%

SAT Math Scores

(Represents data for 74% of applicants and 81% of admitted Students)

800	17%	12%	28%
700 - 790	49%	9%	55%
600 - 690	25%	5%	16%
Below 600	9%	1%	1%

ACT Composite Scores

(Represents data for 44% of applicants and 36% of admitted Students)

34 - 36	30%	10%	55%
31 - 33	38%	5%	30%
25 - 30	27%	3%	14%
Below 25	5%	1%	1%

Source: Office of Institutional Research

Retention and Graduation Rates in Yale College

- 99% of freshmen return for their sophomore year
- 96% of undergraduates graduate within five years*
- 98% graduate within six years*

*Graduation rates for fall 2007 entering cohort

Outreach Efforts

Yale believes that undergraduate education is enriched by learning and living with individuals who represent many different talents, interests, and experiences. To facilitate broad access to higher education generally and Yale specifically, the Admissions Office actively seeks out and engages the most promising students from every possible background. Yale College recruits a diverse and highly qualified student body, drawing students from all 50 states and over 80 countries and makes a special effort to recruit talented students from disadvantaged backgrounds who might otherwise lack knowledge about the higher education opportunities available to them. Some outreach efforts include:

- Student Ambassadors Yale trains current students, including those from minority and lowincome backgrounds, to serve as ambassadors in their home states and cities over term breaks. Student ambassadors make presentations about Yale admissions and financial aid at high schools identified by the Admissions Office as having significant numbers of high-achieving low-income students. Ambassadors serve as role models and "near peer" advisors, demonstrating that students like them can succeed at Yale.
- QuestBridge Yale partners with QuestBridge (www.questbridge.org), a nonprofit organization that has demonstrated an extraordinary capability for identifying high-achieving, low-income students. Yale and QuestBridge work together to help prospective students understand their college options, write effective applications, and indicate their college preferences.

Transfer Policy

Yale College accepts a small number of transfer students each year. For more on Yale College's transfer policy click <u>here</u>.

Some Facts about Yale College's Financial Aid Policy:

Yale has long been committed to ensuring that a Yale College education is accessible to all qualified students regardless of their economic circumstances. **Yale is committed to a need-blind admissions policy and meets 100% of demonstrated need for all students regardless of citizenship.** Yale does not require students to take out loans for their education, although some students prefer to take out loans rather than work while at Yale.

Parents earning less than \$65,000 (with typical assets) are not required to contribute toward their child's education, and families earning between \$65,000 and \$200,000 annually contribute a percentage of their yearly income towards their child's Yale education, on a sliding scale that begins at 1% just above \$65,000 and moves toward 20% at the \$200,000 level. While most of the scholarship aid is awarded to students from families earning less than \$200,000, Yale does award grant aid to students from families with higher incomes.

In the 2013-14 academic year 49.7% of Yale freshmen qualified for need-based financial aid. All Yale scholarships are awarded on the basis of financial need. Yale does not offer athletic or other merit scholarships.

For more information about financial aid in Yale College, click <u>here</u>.

What does a Yale College Education Cost?

The full cost of attending Yale College in 2013-14, before any financial aid is taken into account, was \$60,900. The median net cost for students receiving financial aid was \$11,925. Yale provided an estimated \$119 million in grant aid in 2013-14, compared to \$99 million in 2009-10. Over the past decade, tuition, room and board, and fees have risen by 4% annually, on average.

Undergraduate Tuition, Fees & Other Expenses

Year	2009-10	2013-14
Total Cost of attendance	\$54,589	\$60,900
Tuition, room & board, and fees	\$50,550	\$57,500
Estimated indirect expenses		
(i.e., books, travel, personal expenses)	\$ 3,636	\$ 3,400
Median net cost of attendance for		
students receiving financial aid	\$ 9,590	\$11,925

Who Receives Aid?

Students from a wide range of socio-economic backgrounds may be eligible for need-based aid. Each family has unique circumstances that may warrant consideration for financial assistance. The following data are based on the 2013-14 academic year:

- 49.7% of freshmen and 52.3% of all undergraduates received need-based aid from Yale.
- 64.2% of all Yale undergraduates received some financial assistance from any source (scholarships, grants, low-interest educational loans, or workstudy programs).
- About 54% of Yale undergraduates worked on campus or with participating non-profit agencies. Yale's minimum pay rate for on-campus employment was \$12.00 per hour.





Family Income Level (Aided Students Only)

Loans at Graduation

Yale does not package loans as part of a student's aid package; full need is met with grant, work-study, and summer earnings. The typical debt of students graduating from Yale College is about one-half the national average. Some students **elect** to take loans, but the proportion of students taking out loans has fallen for the last few graduating classes. **The vast majority of students – more than 80 percent – do not borrow to finance their education**.

Class Year	2010	2011	2012	2013
% of graduates who borrowed	28%	22%	16%	16%
Median debt for borrowers	\$7,125	\$6,585	\$10,835	\$11,000
Average debt for borrowers	\$9,428	\$9 <i>,</i> 000	\$12,626	\$13,009
Average debt for entire class	\$2,616	\$1,974	\$ 2,083	\$ 2,079
% of students with zero loan				
debt at graduation	72%	78%	84%	84%

THE STUDENT EXPERIENCE AT YALE

The student experience at Yale is marked by the wide range of opportunities available to its undergraduates. In addition to almost 400 active student organizations, the University also sponsors many cultural shows, guest lectures, forums and other events throughout the year.

In keeping with this mission, Yale encourages undergraduates to take advantage of learning opportunities outside the classroom, such as research with faculty members and study abroad. In Spring 2012, 51% of Yale seniors reported having conducted research with a faculty member, and 69% reported having studied or interned abroad, during their time at Yale.

To learn more about the goals of the undergraduate curriculum at Yale, click here.

The following survey results reflect student assessment of the Yale experience as a whole, including these extracurricular offerings.



Source: 2012 Yale Senior Survey

Participation in Activities Reported by Yale Seniors Over 4 Years

Activity	Percentage
Independent study	38%
Research with a faculty member	51%
Publish or present a paper off-campus	18%
Study or intern abroad	69%
Internship in the US	63%
Music or theater group	34%
Student government	10%

Activity	Percentage
Political group	20%
Cultural or ethnic organization	34%
Volunteer service	62%
Fraternity or sorority	16%
Intercollegiate athletics	15%
Club sports	22%
Intramural athletics	46%

Source: 2012 Yale Senior Survey

ACADEMICS & TEACHING IN YALE COLLEGE

Yale College offers a liberal arts education that aims to cultivate a broadly informed, highly disciplined intellect without specifying in advance how that intellect will be used. Its main goal is to instill knowledge and skills that students can bring to bear in whatever work they eventually choose.

Most Popular Undergraduate Majors in 2012-13:

- Economics
- Political Science
- History
- Biology (Ecology & Evolutionary Biology and Molecular, Cellular & Developmental Biology)
- Psychology
- English

Student/Faculty Ratio: 6:1

Class Size at Yale College (Fall 2013)*

Number of Students	2-9	10-19	20-29	30-39	40-49	50-99	100+	Total
Number of Classes	406	584	115	53	35	63	33	1,289

*Does not include labs or independent study Source: Office of Institutional Research

Yale Faculty

Yale University currently employs 4,290 faculty, of whom 2,314 are either tenured or on the tenure track. All faculty in the Arts & Sciences engage in teaching undergraduate students. To learn more about Yale faculty, click <u>here</u>.

Yale College Seniors Report the Extent to Which Yale Contributed to their Knowledge, Skills, and Personal Development

	Very much	Quite a bit
In-depth knowledge of a field	38%	35%
Thinking critically	53%	33%
Synthesize and integrate ideas and	40%	2.40/
information	49%	54%
Place current problems in historical/	420/	200/
cultural/philosophical perspective	43%	28%
Judging the merits of arguments based on	410/	270/
their sources, methods and reasoning	41%	37%
Understanding the process of science and	220/	210/
experimentation	22%	21%

	Very much	Quite a bit
Write effectively	43%	30%
Communicate well orally	34%	32%
Critical appreciation of art, music, literature, and drama	35%	28%
Leadership skills	38%	29%
Read or speak a foreign language	30%	23%
Understanding and using quantitative reasoning and methods	25%	27%

Source: 2012 Yale Senior Survey

Yale College Seniors Evaluate Their Education and Plan For Their Future

Yale Seniors Evaluate Their Education

	Strongly Agree	Agree
I have been able to find a balance		
between my academic work and	37%	50%
extracurricular activities.		
Source: 2012 Yale Senior Survey		
	Definitely Would	Probably Would
Would you encourage a high school senior who resembled you as a high school senior to attend Yale?	67%	19%

Source: 2012 Yale Senior Survey

Immediate Post-Graduate Plans of Yale Seniors% Entering the workforce64%% Entering graduate or professional school24%

Source: 2012 Yale Senior Survey

Advanced Degrees Held by Yale College Alumni



Percentage of class

Source: 2013 Yale College Alumni Survey

How well did Yale prepare you for graduate or
professional school?

	Very Well	More than Adequately
11 years out (class of 2002)	62%	22%
24 years out (class of 1989)	73%	18%

Source: 2013 Yale College Alumni Survey

Overall, how satisfied are you with your undergraduate education at Yale?

	Very Satisfied	Generally Satisfied
11 years out (class of 2002)	61%	31%
24 years out (class of 1989)	65%	29%

Source: 2013 Yale College Alumni Survey

Would you encourage a current high school senior who resembles you when you were a high school senior (similar background, ability, interests and temperament) to attend Yale?

	Definitely Would	Probably Would
11 years out (class of 2002)	76%	14%
24 years out (class of 1989)	76%	13%

Source: 2013 Yale College Alumni Survey



Source: 2013 Yale College Alumni Survey

	How well did Yale prepare you for your current career?	
	Very Well	More than Adequately
11 years out (class of 2002)	43%	29%
24 years out (class of 1989)	53%	24%

Source: 2013 Yale College Alumni Survey



*Mean income estimated using midpoints of income bands Source: 2013 Yale College Alumni Survey

2012 Annual Individual Income (Full-time Employed Alumni)

Appendix D

Goals for all Yale College Majors

Goals For All Yale College Majors

Updated May 28, 2014

African Studies

Approved by: Cheryl Doss

Students in this major will:

- Gain proficiency in an African language (L4) and an understanding of African culture through that language
- Become familiar with scholarship on Africa in both the humanities and social sciences
- Develop a deeper understanding of Africa within one discipline or topical area
- Produce original research on Africa, based on field work and/or primary sources

African-American Studies

Approved by: Erica James

Students in this major will:

- Learn about the Afro-diasporic experience from various disciplinary and transnational perspectives
- Become knowledgeable about the history, primary methodologies, and breadth of the discipline
- Understand universal cultural and societal themes, especially as they apply to the Afro-diasporic experience
- Become informed thinkers prepared to offer cogent insights to academic and public debates in the discipline
- Develop and strengthen critical writing skills
- Analyze and integrate primary resources into independent, original research and writing

American Studies

Approved by: Ned Blackhawk

Students in this major will:

- Engage in interdisciplinary study of cultures and politics of the United States, representations of national identity, and borderland and diasporic cultures over time
- Explore local, national, and global perspectives by supplementing courses in American Studies with courses from other disciplines
- Choose an area of concentration as a focus for course work
- Develop the critical thinking and effective writing skills required for cultural and social analysis
- Complete a senior project or essay

Anthropology

Approved by: Kalyanakrishnan Sivaramakrishnan

- Develop an appreciation of humans as cultural and biological beings
- Understand how human lifeways are constructed by cultural, social, biological, and ecological conditions and processes
- Gain experience in and knowledge of several anthropological subfields
- Learn social-scientific approaches to problem formulation, project design, comparative analysis, and presentation of findings
- Develop the skills of critical thinking, analytical writing, and effective oral presentation
- Engage in independent research

Applied Math

Approved by: Daniel Spielman

Students in this major will:

- Learn the branches of mathematics most often used in applications
- Be exposed to many areas of applied mathematics
- Gain expertise in one area of applied mathematics
- Complete a research project in applied mathematics

Applied Physics

Students in this major will:

- Understand the central concepts of physics and their operation in a major area of application
- Know how to formulate a scientific question and evaluate quantitative data
- Learn to analyze, evaluate, and design solutions to problems in applied physics and related fields
- Develop effective communication skills
- Engage in independent research

Archaeology

Approved by: Oswaldo Chinchilla

Students in this major will:

- Acquire a broad knowledge of world prehistory and ancient human societies, from prehistoric hunting and gathering peoples to early states and ancient empires
- Learn relevant methods and theories from the social sciences and humanities, including anthropology, art history, and archaeology
- Acquire a solid foundation in field and laboratory methods, including modern dating methods, materials analysis, methods from geological and environmental sciences, and the archaeological applications of Geographic Information Systems
- Have experience in archaeological fieldwork
- Specialize in the archaeology of one or more regions of interest
- Acquire skills in relevant languages for their areas of interest
- Conduct significant independent research and write a senior thesis

Architecture

Students in this major will:

- Observe and analyze architecture through diverse methods of representations
- Understand architecture as an expression of cultural values and human aspirations
- Study the complex social, political and environmental forces that shape and define architecture and the built environment
- Learn to express ideas visually
- Conceptualize and design innovative solutions to architectural problems
- Formulate questions and seek answers through research, writing, and design
- Create a portfolio as a senior exercise

<u>Art</u>

Approved by: Lisa Kereszi

- Develop an understanding of the visual arts through a studio-based curriculum
- Apply fundamentals of art across a variety of media and disciplines
- Relate the practice of making art to the fields of art history and theory
- Gain a high level of mastery of at least one artistic discipline

Astronomy

Approved by: Debra Fischer

Students in this major will:

- Learn to apply physics, mathematics, and statistical analysis to observe, describe, and model the Universe
- Develop skills in research methods, quantitative physical science, and creative problem solving
- Understand topics at the frontier of modern astrophysics and cosmology
- Have opportunities to conduct research and fieldwork, including at the on-campus observatory, planetarium, and world-class astronomical observatories
- Complete an independent senior project

Biomedical Engineering

Approved by: Jim Duncan

Students in this major will:

- Gain a strong grounding in the physical sciences, biological sciences, and mathematics
- Acquire a deep understanding and appreciation of engineering design principles
- Learn how to work in a laboratory situation
- Have significant interaction with faculty members in the department
- Study one of the three subfields of biomedical engineering in greater depth
- Complete a senior project

Chemical Engineering

Students in this major will:

- Develop the ability to apply knowledge of mathematics, science, and engineering
- Be able to design and conduct experiments, as well as analyze and interpret data
- Learn to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- Function on multidisciplinary teams
- Learn to identify, formulate, and solve engineering problems using appropriate techniques, skills, and modern engineering tools
- Understand professional and ethical responsibility
- Be able to communicate effectively
- Obtain the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- Recognize the need for and have the ability to engage in lifelong learning
- Be knowledgeable about contemporary issues affecting the field

Chemistry

- Master central concepts of chemistry and their practical applications in modern laboratory and research settings
- Be trained broadly and deeply in the chemical sciences
- Apply the scientific method to the quantitative formulation and analysis of scientific questions
- Be knowledgeable about the important relationships between chemistry and modern society
- Organize complex subjects in a logical manner through effective speaking and writing skills

Classics – Classical Civilization

Students in this major will:

- Acquire a thorough knowledge of the major genres and works of ancient Greek and Roman literature
- Become competent at translating texts in Greek or Latin, or both (L4)
- Analyze works of Greek and Roman literature in their cultural, political, and historical contexts
- Have a sound knowledge of Greek and Roman history
- Use different media in interpreting the literature, culture, and history of Greece and Rome
- Understand trends in classical scholarship
- Develop an appreciation of how different societies, from medieval times forward, have shaped our conception of classical antiquity
- Gain insight into how the study of classical antiquity can inform the preoccupations of the contemporary world
- Produce a senior project entailing significant original research

Classics – Greek

Students in this major will:

- Acquire advanced competence in ancient Greek (multiple L5) and be able to translate Greek literature accurately and fluently
- Have a thorough knowledge of the major genres and works of Greek literature and be able to analyze them in their cultural, political, and historical contexts
- Possess a sound knowledge of Greek history from the late Bronze Age to the Hellenistic period
- Use different media in interpreting Greek literature, culture, and history
- Understand trends in classical scholarship
- Complete a senior departmental examination, and, for intensive majors, a senior essay as well
- Gain insight into how the study of classics can inform the preoccupations of the contemporary world

Classics – Greek and Latin

Students in this major will:

- Acquire advanced competence in ancient Greek and Latin (multiple L5) and be able to translate Greek and Latin literature accurately and fluently
- Have a sound knowledge of the major genres and works of both literatures and be able to analyze them in their cultural, political, and historical contexts
- Know the contours of Greek and Roman history and have a thorough grasp of the culture, society, political institutions, topography, art, and architecture of Athens and Rome in classical antiquity
- Use different media in interpreting the literature, culture, and history of Greece and Rome
- Understand trends in classical scholarship
- Be able to compare the cultures, societies, and art of Greece and Rome and to appreciate their contact and interrelationship
- Complete a senior departmental examination, and, for intensive majors, a senior essay as well
- Gain insight into how the study of classics can inform the preoccupations of the contemporary world

Classics - Latin

- Acquire advanced competence in classical Latin (multiple L5) and be able to translate Roman literature accurately and fluently
- Have a thorough knowledge of the major genres and works of Roman literature and be able to analyze them in their cultural, political, and historical contexts
- Possess a sound knowledge of Roman history from the early Republic to the reign of Justinian
- Use different media in interpreting the literature, culture, and history of ancient Rome
- Understand trends in classical scholarship
- Complete a senior departmental examination, and, for intensive majors, a senior essay as well
- Gain insight into how the study of classics can inform the preoccupations of the contemporary world

Cognitive Science

Students in this major will:

- Learn how the mind works by exploring various cognitive processes
- Develop an interdisciplinary perspective that connects topics in psychology, computer science, linguistics, philosophy, economics, and neuroscience
- Become familiar with methodological approaches used in the study of cognition
- Engage in independent research leading to a senior essay

Computer Science

Submitted by: Stanley Eisenstat

Students in this major will:

- Learn fundamental concepts of programming architecture and design
- Understand the uses of algorithms and the organization of data
- Develop facility with both systems oriented and mathematically oriented problem solving
- Acquire a depth of knowledge in at least one specialized area of computer science
- Complete a portfolio of substantial original work

Computing and the Arts

Approved by: Julie Dorsey

Students in this major will:

- Gain a theoretical, philosophical, historical, and practical understanding of the connections between computation and the arts
- Develop a specialty exploring the relationship of computing to music, art, architecture, theater studies, or art history
- Analyze, create, and explore artistic artifacts in the chosen specialty through the use of computation, mathematics, and information technology
- Understand the algorithmic nature of problems arising in art and develop appropriate problem-solving skills
- Complete a final project that demonstrates mastery of the subject matter and its creative application

East Asian Languages and Literatures

Students in this major will:

- Attain advanced proficiency in Chinese and/or Japanese (multiple L5) from everyday use to research purposes
- Become familiar with modern and pre-modern East Asian cultural traditions
- Gain interdisciplinary, comparative perspectives on East Asian humanities (including theater and film)
- Acquire analytical and critical skills for the study of East Asian cultures
- Produce a piece of original research informed by original-language sources

East Asian Studies

Approved by: Valerie Hansen

- Develop an understanding of both the region of East Asia and a specific country through course work in Chinese, Japanese, and Korean taught by experts who work with those languages
- Achieve fluent and spontaneous interaction with native speakers (L5)
- Learn to read and understand complex texts in Chinese, Japanese, or Korean (L5)
- Experience Chinese, Japanese, or Korean society through living in East Asia for at least a summer
- Using original-language materials, complete a major research project that requires Chinese, Japanese, or Korean-language materials

Ecology and Evolutionary Biology

Approved by: Thomas Near

Students in this major will:

- Understand, articulate, and explore the mechanisms that generate and maintain biodiversity
- Learn about molecules, cells, organs, organisms, and ecosystems, and about the evolutionary processes that shape them
- Develop critical and original thinking skills by analyzing experimental strategies, designing experiments, and interpreting data
- Have opportunities to conduct independent research in both the laboratory and the field
- Explore one subfield or research question in depth through independent study or a senior essay

Economics

Approved by: Samuel Kortum

Students in this major will:

- Learn basic economic principles and methods through study of microeconomics, macroeconomics, and econometrics
- Be able to describe economic institutions underlying economic systems
- Identify and analyze objectives and constraints at the core of an economic issue
- Use equilibrium reasoning in market or strategic settings
- Explicate an economic problem through the use of appropriate data
- Test hypotheses and isolate economic forces using statistics and econometrics
- Propose and execute a sound methodology to answer a question in economics or public policy

Economics and Math

Approved by: Samuel Kortum

Students in this major will:

- Learn basic economic principles and methods, through the study of microeconomics, macroeconomics, and econometrics
- Be able to understand, construct, and write mathematical proofs
- Use mathematics to illuminate the institutions, objectives and constraints at the core of an economic issue
- Analyze market settings with general-equilibrium theory and strategic settings with game theory
- Explicate an economic problem through the use of appropriate data, economic theory, and mathematical modeling
- · Test hypotheses and isolate economic forces using statistics and econometrics
- Propose and execute a rigorous methodology to answer a question in economics or public policy

Electrical Engineering

Approved by: Rimas Vaisnys

- Develop the ability to apply knowledge of mathematics, science, and engineering
- Be able to design and conduct experiments, as well as analyze and interpret data
- Learn to identify, formulate, and solve engineering problems using appropriate techniques, skills, and modern engineering tools
- Be able to communicate effectively

<u>English</u>

Approved by: John Rogers

Students in this major will:

- Explore important works of English, American, and world literatures in English
- Become familiar with a wide variety of authors, literary genres, and historical periods
- Gain skills of critical and historical analysis and argument
- Develop research skills
- Develop and master a style of elegant, felicitous, and persuasive critical prose
- Produce a culminating literary-critical essay that rests on substantial independent work

Environmental Engineering

Approved by: Jordan Peccia

Students in this major will:

- Develop a broad foundation in the physical, biological, and chemical sciences and in applied mathematics
- Apply quantitative problem-solving skills to a broad spectrum of water quality, air quality, and environmental design problems
- Understand the global, environmental, economic, and social implications of engineering practice and design
- Learn to work collaboratively
- Complete a capstone research or design project

Environmental Studies

Approved by: Amity Doolittle

Students in this major will:

- Receive broad training in environmental science and environmental problem solving
- Acquire field training and research methods
- Collect scientific data, evidence, and archival materials
- Analyze and integrate quantitative and qualitative information to reach judgments regarding causal influence
- Learn to communicate effectively in writing and speaking
- Conduct independent, original research

Ethics, Politics, and Economics

Students in this major will:

- Receive broad training in ethics, politics, economics, and statistics
- Develop interdisciplinary thinking skills through readings, seminar discussions, and papers
- Become proficient in oral expression and debate
- Understand the applications of the major's subject matter beyond the classroom
- Design and carry out a substantial and interdisciplinary senior thesis project

Ethnicity, Race, and Migration

- Engage in an interdisciplinary and comparative study of the forces that have created a multicultural, multiethnic, and multiracial world
- Become familiar with traditions and debates surrounding concepts of indigeneity, ethnicity, nationality, and race
- Define an area of focus and study it in depth
- Understand theoretical and methodological issues in the study of ethnicity, race, and migration
- Develop the critical thinking and effective writing skills required for cultural and social analysis
- Complete a senior essay

Film Studies

Approved by: JD Connor

Students in this major will:

- Acquire advanced skills in the history and formal analysis of film
- Become conversant with theoretical perspectives on the moving image
- Understand films in national perspective
- Integrate theory and analysis through creative engagement with contemporary media practices
- Hone nonfiction writing skills
- Obtain the expertise necessary to produce original work in a particular area of study or practice

French

Students in this major will:

- Attain advanced proficiency in both written and oral French (multiple L5)
- Acquire a deep understanding of the literatures and cultures of francophone countries
- Gain analytical and critical reading skills
- Develop rhetorical and argumentative abilities
- Conduct independent research using French-language sources
- Produce a work of original research and interpretation

Geology and Geophysics

Approved by: David Evans

Students in this major will:

- Understand the history and evolution of the Earth and other planets, from their deep interiors to surface environments and climate
- Learn how geological, physical, chemical, and biological processes are integrated within a planetary system
- Understand the science and impact of natural disasters
- Become knowledgeable about energy and natural-resource distribution and usage
- Study humanity's increasing role as a geological agent of global change
- Integrate field observations, experimental data, and theory across wide ranges of temporal and spatial scales
- Develop critical thinking, quantitative analysis, and written and oral communication skills for both scientific and general audiences
- Conduct original scientific research

<u>German</u>

Approved by: Paul North

Students in this major will develop:

- Advanced proficiency in German (multiple L5) in its everyday, critical, and literary idioms
- A philological attitude, learning how to approach a literary text, an image, or a film with careful attention to its singularities
- A historical sense, through study of Germanic cultural histories and theories of history written in German
- A capacity for critique, working through major texts in German philosophy, media theory, social and political thought, and literary theory
- A fascination with one work, author, artist, problem, historical moment, figure, or phrase in a senior essay

Global Affairs

Approved by: Susan Hyde

Students in this major will:

- Learn to understand global affairs through interdisciplinary academic training and experiences outside the classroom with the ultimate goal of inspiring and preparing students for global leadership and service
- Become conversant with theoretical and applied scholarship in international development and international security
- Critically analyze research in the social sciences as it relates to global affairs
- Learn to produce original research and evaluate the advantages and disadvantages of various approaches to research design
- Gain expertise in one area of global affairs
- Apply academic knowledge and skills learned in the major to an applied policy question in the Senior Capstone Project
- Become proficient in at least one non-English modern language (L5)

<u>Greek</u>

Students in this major will:

- Gain an appreciation of the development and complex legacy of the Hellenic world and its different civilizations
- Acquire advanced competence in ancient Greek (L5) and proficiency in modern Greek (L4), and be able to read both literatures fluently
- Have a sound knowledge of the history of ancient Greece from the Archaic to the Hellenistic age, of Byzantine Greece, and of modern Greece from the eighteenth century to the present
- Use different media and disciplines in the study of ancient and modern Greece
- Understand trends in scholarship on ancient and modern Greece
- Complete a senior departmental examination

<u>History</u>

Approved by: Beverly Gage

Students in this major will:

- Learn about the ways in which human activities of the past have shaped the present
- Understand both how the contemporary world came to be and why societies change and develop over time
- Develop the ability to write about history with precision, clarity, and conciseness
- Learn to read a variety of texts critically and analytically and to write about them in engaging ways
- Write and present an interpretive and analytical senior essay

History of Art

Approved by: Mimi Yiengpruksawan

- Critically analyze, evaluate, and describe works of art and architecture, taking into account form, function, and meaning within their distinctive historical and cultural contexts
- Self-consciously bring to bear a range of critical theoretical frameworks and methodologies to the analysis of works of art and architecture
- Conduct original research utilizing a range of primary and secondary sources, to develop a persuasive argument based on new research, and to situate a research project/ paper within a broader scholarly field (or fields)
- Reach out to the broader arts environment at Yale, New Haven, and the northeast corridor to integrate classroom teaching with primary analysis of objects in Yale's various museums and special collections, as well as in nearby museum collections
- Be introduced to the rudimentaries of the discipline of art history, and to provide them with analytical and practical skills—"visual literacy"—that may be applicable in a range of real world visual arts environments

History of Science, Medicine and Public Health

Submitted by: Joanna Radin

Students in this major will:

- Understand and analyze key themes in the historical development of science, medicine, and public health
- Learn to identify and work with primary sources
- Combine courses in History of Science, Medicine, and Public Health with relevant courses from the natural sciences, the social sciences, and the humanities
- Conduct original research on one or more topics
- Complete a senior essay or project

<u>Humanities</u>

Approved by: Norma Thompson

Students in this major will:

- Become familiar with classical works of Western European culture and at least one non-Western culture
- Learn humanistic approaches to the study of nature and human nature
- Gain expertise in historical modes of analysis
- Understand ongoing theoretical debates about the distinctive modernity of the present-day human condition
- Understand key debates about modes of humanistic knowing as characterized by evidence and persuasion, insight and judgment
- Draw from and integrate different academic specialties in the study of a particular phenomenon
- Complete a substantial senior essay in an individually devised field of concentration

<u>Italian</u>

Approved by: Christiana Purdy-Moudarres

Students in this major will:

- Acquire advanced speaking, writing, and reading skills in Italian (multiple L5)
- Gain a thorough understanding of Italian artistic, literary, and cultural traditions
- Become conversant with literary and cultural theory
- Develop and refine the reading, writing, speaking, critical thinking, and research skills central to scholarship
- Have opportunities to study abroad
- Complete a senior essay, written in Italian, that demonstrates careful reading and research on a chosen topic

Judaic Studies

Students in this major will:

- Become proficient in modern Hebrew (L4)
- Gain broad knowledge of Jewish history
- Study Hebrew literature and its interpretive history from the Bible to the present
- Become familiar with problems and concepts in Jewish thought
- Understand the role of Jews and Jewish ideas in the shaping of Western civilization
- Write a senior essay incorporating original research

Latin American Studies

- Become proficient in one Latin American language (Spanish or Portuguese, L4) and conversant with the other (L2)
- Understand the societies and cultures of Latin America
- Build an interdisciplinary foundation of the region for courses in the social sciences, language and literature, history, history of art, and humanities
Linguistics

Approved by: Raffaella Zanuttini

Students in this major will:

- Become familiar with important discoveries and results in linguistics
- Develop specialized knowledge in one linguistic subfield
- Acquire methodological tools needed for linguistic research
- Receive training in hypothesis formation and testing, in analysis, and in skills of argumentation
- Explore connections between linguistics and other fields, such as cognitive science, anthropology, and philosophy
- Conduct independent research and write a senior essay in the subfield of specialization
- Become acquainted with the properties of a variety of languages other than English

Literature

Students in this major will:

- Learn to approach literature as an object in itself, in comparative perspective, and in interdisciplinary contexts
- Acquire knowledge of literary theory, genres, and interpretation
- Use critical and research tools in textual analysis, including analysis of film
- Become acquainted with a variety of literatures of different nations, periods, and genres, and understand the theoretical challenges posed by their comparison
- Develop a focus on one or two foreign-language literatures
- Complete a research-based senior project

Mathematics

Students in this major will:

- Become familiar with at least two core areas of mathematical knowledge
- Develop problem-solving skills in several areas of mathematics
- Learn to understand, construct, and write mathematical proofs
- Be able to explain mathematics both in writing and in oral presentation
- Complete a senior requirement through work on an advanced mathematical topic

Mathematics and Philosophy

- Pursue questions that arise where mathematics and philosophy intersect
- Learn to address these questions with an insight, creativity, and rigor informed by the philosophical background of the question and relevant developments in mathematics
- Become broadly acquainted with modern mathematics
- Understand basic findings in mathematical logic and set theory
- Study the use of logical and mathematical methods in philosophy
- Investigate philosophical questions raised by mathematics
- Explore the bearing of mathematics on traditional philosophical problems
- Be prepared to carry out independent research in mathematics or philosophy

Mathematics and Physics

Submitted by: Vincent Moncrief

Students in this major will:

- Become familiar with three or more core areas of mathematical and physical knowledge through appropriate course work
- Develop problem-solving skills in several areas of mathematics and physics
- Learn to understand, construct, and write mathematical proofs and to formulate physical problems in mathematical terms
- Learn to explain mathematical and physical ideas and results in writing and in oral presentations
- Engage in independent research
- Complete a senior project and give an oral presentation about it

Mechanical Engineering

Approved by: Corey O'Hern

Students in this major will:

- Develop the ability to apply knowledge of mathematics, science, and engineering
- Be able to design and conduct experiments, as well as analyze and interpret data
- Learn to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- Function on multidisciplinary teams
- Learn to identify, formulate, and solve engineering problems using appropriate techniques, skills, and modern engineering tools
- Understand professional and ethical responsibility
- Be able to communicate effectively
- Obtain the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- Recognize the need for and have the ability to engage in lifelong learning
- Be knowledgeable about contemporary issues affecting the field

Modern Middle East Studies

Approved by: Andrew March, Beatrice Gruendler

Students in this major will:

- Engage in interdisciplinary study of the modern Middle East in at least two of its subregions
- Demonstrate proficiency in Arabic, Hebrew, Persian, or Turkish (at least two L5)
- Come to understand the cultural, historical, religious, political, and social forces shaping the region
- Develop and refine the reading, writing, speaking, critical thinking, and research skills central to scholarship
- Have opportunities to study abroad
- Produce a senior essay on an aspect of regional history, politics, or culture

Molecular Biochemistry and Biophysics

Revised by: Michael Koelle

- Understand the molecular mechanisms underlying biological phenomena
- Apply concepts from chemistry and physics to understand how biological molecules function
- Learn how studies of biological molecules uncover the causes of human disease and help develop new medicines
- Develop critical and original thinking skills by analyzing experimental strategies, designing experiments, and interpreting data
- Explore advanced topics in biochemistry and biophysics through critical reading of the primary scientific literature
- Have the opportunity to engage in independent research in a laboratory at Yale

Molecular, Cellular, and Developmental Biology

Students in this major will:

- Learn about molecular and cellular biology and genetics, including issues in cell and developmental biology, neurobiology, and aspects of computational biology
- Have the option to pursue interdisciplinary work in biotechnology or neurobiology
- Develop critical and original thinking skills by analyzing experimental strategies, designing experiments, and interpreting data
- Have opportunities to conduct independent laboratory research
- Complete a senior essay, a tutorial, or an individual research project

<u>Music</u>

Approved by: Ian Quinn

Students in this major will:

- Gain a thorough grounding in the history of Western music and a strong introduction to world musical cultures
- Reach advanced proficiency in music theory, aural skills, musicianship, and analysis
- Attain a high level of mastery in at least one specialized area of music: performance, composition, or musicology
- Pursue advanced topics in music studies through seminar courses requiring substantial research and writing
- Have the opportunity to participate in music-making ensembles from many traditions
- In the intensive major, complete a senior essay or project

Near Eastern Languages and Civilizations

Approved by: Ben Foster

Students in this major will:

- Develop a sound knowledge of one or more Near Eastern languages, ancient or modern (L4 or L5, depending on the language)
- Acquire a broad familiarity with the history and civilizations of the Near East
- Become proficient in the history, religion, and culture of at least one Near Eastern people and civilization, ancient or modern
- Master essential research skills and tools for a subfield of choice
- Write a senior project based on in-depth research, using materials in one or more Near Eastern languages

<u>Philosophy</u>

- Acquire a broad understanding of the history of philosophy
- Study works by Plato, Aristotle, Descartes, Hume, and Kant
- Become acquainted with modern logic and its philosophical significance
- Engage in the practice of philosophy in a range of its most important subfields
- Learn to pursue philosophical questions with insight, independence of mind, and argumentative rigor
- Face philosophical questions wherever they arise: not only in philosophy courses and texts, but in other disciplines, in moral and political conduct, and in everyday life
- Learn to address questions with open-mindedness, clarity, and precision, and with an abiding concern for evidence, argument, and the scope and coherence of their emerging views
- Carry out independent philosophical research

Physics

Approved by: John Harris

Students in this major will:

- Understand basic principles of physics and their applications
- Develop the ability to formulate and solve problems in physics and across the sciences and engineering
- Learn to formulate scientific questions and to approach their solution creatively
- Develop critical thinking and the ability to communicate and collaborate effectively
- Engage in independent research culminating in a senior project

Physics and Geology

Approved by: David Evans and John Harris

Students in this major will:

- Understand topics ranging from atmosphere, ocean, and climate dynamics to planetary physics
- Apply fundamental physical principles to the study of Earth and other planetary bodies
- Learn to formulate scientific questions and to approach their solutions creatively
- Develop critical thinking, quantitative analysis, and written and oral communication skills for both scientific and general audiences
- Complete a senior project and oral presentation

Physics and Philosophy

Students in this major will:

- Pursue questions that arise where physics and philosophy meet
- Address questions with insight, creativity, and rigor in a manner informed by the philosophical background of the questions and by an understanding of the basic principles of physics
- Become broadly acquainted with modern physics
- Understand mathematical logic and its philosophical significance
- Engage in the examination of philosophical questions raised by natural science, particularly by physics
- Explore the bearing of physics on perennial philosophical debates
- Carry out independent research in physics or philosophy

Political Science

Approved by: David Simon

Students in this major will:

- Learn about issues related to power, representation, institutional order, distribution, conflict, and identity, from the local to the global level
- Develop the tools to think critically and analytically about politics and public policy
- Have opportunities to conduct independent research, including fieldwork
- Complete a senior essay based on extensive research

Portuguese

- Acquire a comprehensive knowledge of the literatures and cultures of the Lusophone diaspora
- Demonstrate advanced proficiency in Portuguese (multiple L5)
- Have opportunities to study abroad
- Complete a senior essay or a departmental examination

Psychology

Approved by: Laurie Santos

Students in this major will:

- Develop a strong foundation in the science of psychology
- Gain a basic understanding of how human and nonhuman animals think, perceive, behave, and learn
- Learn about psychological questions from both social-science and natural-science perspectives
- Develop the critical and original thinking skills needed to evaluate psychological research
- Synthesize and review specific topics in the psychological literature
- Acquire the quantitative reasoning skills needed for the statistical analyses used in psychological research
- Engage in independent research to explore their own questions about the mind
- Produce a substantial paper in satisfaction of the senior requirement

Religious Studies

Approved by: Kathryn Lofton

Students in this major will:

- Understand religion as a form of human thought and activity
- Learn about religions from around the world
- Appreciate the role of religions as social movements, textual traditions, sensory cultures, and arbiters of value
- Acquire the linguistic, philosophical, and historical acumen necessary for in-depth research
- Gain analytical perspective on the relationship between evidence and interpretation
- Improve rhetorical and argumentative abilities
- Produce a work of original research and interpretation as a senior essay

<u>Russian</u>

Approved by: Bella Grigoryan

Students in this major will:

- Acquire advanced speaking, writing, and reading skills in Russian (multiple L5)
- Gain a thorough understanding of the Russian literary and cultural traditions
- Develop and refine reading, writing, speaking, critical thinking, and research skills central to scholarship
- Become conversant in literary and cultural theory
- Have opportunities to study abroad
- Produce original scholarship on a particular topic in Russian literature and/or culture as a senior essay

Russian and East European Studies

Approved by: Bella Grigoryan

- Acquire intermediate-to-advanced knowledge of Russian (multiple L5) or of another Slavic language, e.g., Polish or Czech (L4)
- Engage in interdisciplinary study of Russia, the former Soviet republics, Eastern or East Central Europe
- Come to understand the historical, political, social, cultural, and economic forces that have shaped the region under study
- Develop and refine reading, writing, speaking, critical thinking, and research skills central to scholarship
- Develop a particular area of expertise, defined geographically and chronologically (e.g., contemporary Central Asia, Soviet Russia)
- Have opportunities to study abroad
- Produce original, interdisciplinary scholarship on an aspect of Russian, East European, or Central Asian history, politics, or culture in a senior essay

Sociology

Students in this major will:

- Understand the structure of modern society and the role of social forces in shaping individual lives
- Develop the capacity to think critically about social issues, including those related to social inequality and social change
- Be prepared to conduct basic research in the field using qualitative and quantitative methods
- Complete a scholarly review or critical analysis of a sociological subfield in the standard major, or a substantial independent research project in the intensive major

South Asian Studies

Approved by: Sara Shneiderman

Students in this major will:

- Complement work in their primary major (South Asian Studies is a second major) with a broad understanding of the history, culture, and languages of South Asia (L5)
- Develop a working knowledge of the region's current social, political, and economic conditions
- Appreciate and work toward attaining regional knowledge and language skills

<u>Spanish</u>

Approved by: Susan Byrne

Students in this major will:

- Have the opportunity to acquire thorough linguistic proficiency in Spanish as well as in-depth knowledge of cultural and literary topics
- Study with an award-winning, internationally-recognized faculty
- Read, discuss and write about Spanish and Latin American works of literature in Spanish

Special Divisional Majors

Approved by: Jasmina Besirevic-Regan

Students in the major will:

- In collaboration with advisers, create a clear and coherent major design in a field or combination of fields for which there is no existing major
- Ensure that the major has breadth and depth comparable to other majors in Yale College
- Establish criteria for selecting courses and organize course work to obtain an adequate base for advanced study of a specific topic
- Design and gain multi- or interdisciplinary perspective in the proposed fields of study
- Engage in independent research culminating in a senior project

Statistics

- Understand the science and art of prediction and explanation
- Learn to use the tools of practical statistical analysis
- Study probability, statistics, and data analysis in depth
- Be able to apply probability theory to topics in economics, biology, medicine, engineering, and other areas
- Complete a senior project

Theater Studies

Approved by: Dominika Thurston

Students in this major will:

- Understand performance as a form of thought, expression, and inquiry
- Engage with theater, dance, and performance studies as methods of research that are interdisciplinary in scope and global in perspective
- Develop a nuanced understanding of the reciprocal relationship between theory and practice
- Acquire knowledge of dramatic literature, theater and dance history, and performance theory and practices of diverse cultures and traditions
- Develop abilities in several areas of practice
- Refine tools of critical articulation
- Develop awareness of and practical strategies that speak to the ethical, aesthetic, political, historical, and cultural contexts in which work is created
- Produce a body of creative and critical work, including a senior project

Women's, Gender, and Sexuality Studies

- Become thoroughly familiar with themes, problems, and debates in the study of women, gender, and sexuality
- Become acquainted with quantitative, qualitative, and interpretive methodologies used in the study of women gender, and sexuality
- Achieve proficiency in at least one methodology used in the field for research purposes
- Understand gender and sexuality as construed across a range of social divisions and historical, political, and geographical contexts
- Study topics in the field from any of a number of disciplinary approaches in the humanities and social sciences
- Evaluate the effects of political and economic events on gender and sexuality identities, expressions, aesthetic forms, and politics
- Analyze representations of gender and sexuality in politics, medicine, law, literature, film, theater, television, photography, digital media, and the academy
- Develop critical thinking and effective writing skills
- Conduct original research on women, gender, and sexuality, culminating in a senior essay

Appendix E

"An Emerging Vision for Yale"

"An Emerging Vision for Yale" President Peter Salovey

Address the Prerequisites

To build on the strengths of the past, address present priorities, and reach to the future, it is essential to address what social scientists call "enabling conditions" that will ensure success. The primary ones at Yale focus on financial stability including clearer processes for setting spending and fundraising priorities. Without getting our fiscal house in order, we will be hampered in launching new initiatives and even in maintaining the status quo.

A second major prerequisite is broadening the base of wisdom to inform major decisions by involving deans, faculty, and other senior leaders in policy discussions, priority-setting, and aligning around a shared vision. Related to that goal is the need to address the concerns of faculty members, including some of our most loyal, that they are not sufficiently informed of or involved in important decisions as well as the disaffection of some of our M&P staff members who feel isolated from decision-makers and believe they were disproportionally affected by previous budget cuts.

- Bring the operating budget of the university into financial equilibrium within three years with some "head room" for new initiatives, and fundraise aggressively in order to create resources to promote a more unified, accessible, innovative, and excellent university.
- Create a predictable and forward-looking context for planning and strategy by developing and announcing a capital plan that indicates the funds required and their sources (debt, gift, CRC) for a set of major building projects (including two residential colleges, the biology building, HGS renovations, Hendrie Hall, Drama School facilities, and possibly a research building at the Medical School). Indicate a set of assumptions that, if met, would allow Yale to commit to a date certain for the initiation of each of these projects.
- Stabilize the IT environment at Yale: Successfully launch Workday (Oracle replacement) and then create a plan that reduces uncertainty about various academic and administrative IT upgrades, enhancements, and initiatives.
- Foster input from and interaction with campus constituencies that have in recent years felt underinvolved in university decisions. For example: develop the new university cabinet that includes deans and VPs; create an FAS faculty input mechanism based on the recommendations of the committee now meeting; and introduce an M&P staff consultation and feedback process.
- Improve dramatically on-campus communications through multiple channels such as the new biweekly "Notes from Woodbridge Hall," provost's memo on capital projects update, and consider an annual State of the university report.

Promote a More Unified Yale

Increasingly, academic innovation—in research as well as in educational programs—draws together multiple disciplines in collaboration and new forms of interaction. These cross-disciplinary efforts can provide the foundation for more nuanced and complete understanding of complex questions, promote academic joint ventures across campus, use resources more efficiently, and create a climate of interdependence and unity.

• Create a new designation of "university program" for major cross-disciplinary programs, with such designation determined by criteria to be developed by the University Cabinet. Focus energy and resources on a limited set of such university programs.

- Take advantage of the interest in neuroscience in several schools and FAS departments along with the search for a new chair of the Department of Neurobiology in the School of Medicine to create a "University Program in Neuroscience" to pilot this "new" model and develop a test case in the academic realm for unifying sciences from Science Hill to the Medical School to the West Campus.
- Raise funds that could be used to support the creation of other distinctive educational or research programs that bring together unlikely disciplinary collaborators and may be designated as "University Programs" (e.g., School of Art and School of Engineering in the Center for Engineering Innovation and Design; Yale Climate and Energy Initiative; the Center for Network Science; 'Arts Practice' in Yale College taught by professional school faculty.
- Leverage the growing faculty scholarship about and in Africa and support Yale faculty and schools wishing to expand their work on the continent; also coordinate admissions efforts, alumni networks, fundraising, and communications. Place in context of Yale's internationalization efforts of the last decade (East Asia, South Asia, Brazil).

Focus Especially on Accessibility

We have a responsibility to recognize that the quality of Yale's faculty, the investment of \$5 billion in our facilities over the past 20 years, and our unmatched collections should be shared widely while maintaining and enhancing the quality of a Yale College education. We have made great strides in expanding accessibility by increasing financial aid. Now, based on the incredibly low rate of Yale College admissions (from more than 30,000 applications), we need to increase the number of students in the college. And we should open the "virtual" doors to our classrooms and collections through digital dissemination.

- Build two new residential colleges that preserve what is special about the Yale College experience and allow for growth in enrolled students by about 15 percent. Finish raising funds for all construction costs while refining estimates of operating budget impact, which should be positive. [Funds raised by June 2014.] Charge a faculty committee to review assumptions and refine planning.
- Work with Yale College and the Office of Undergraduate Admissions on a strategy for discovering the very best low-income high school students, encouraging their application to Yale College, and supporting them when admitted.
- Appreciate that Yale's intellectual wealth—as represented by the faculty and our unmatched collections—can be made more accessible through online programs and tools. In engaging with these new technologies, place as a priority their use to improve teaching on campus. Increase the reach of Yale's outstanding faculty as a part of advancing the institution's basic mission to disseminate knowledge. Recognize that on-line tools will be used in the service of Yale's "first mission," providing an outstanding educational experience for students in which they learn from the world's best scholars/researchers as well as from one another.

Celebrate and Extend Innovation as a Yale Hallmark

The list of Yale "firsts" is impressive, and we must continue to promote a climate of innovation in the classroom, research, student life, and our relationship with the city of New Haven.

• Working with the new mayor, the new school superintendent, and the Board of Aldermen, embrace the most innovative approach to university-host city relations of any major research university in the country. Monitor carefully and preserve the unique retail climate around campus, continue to promote homeownership to stabilize neighborhoods, and engage the new school

superintendent and support his school-reform agenda. Increase our commitment to supporting the entrepreneurial activities of our students and faculty that promote economic development and job creation in New Haven. Launch a major communications effort to promote the positives of New Haven. Contribute more generally to job creation in New Haven. Explore airport expansion and a one-hour train to New York.

- Appreciate that in one of the world's most outstanding research universities, innovation must be inherent in our approach to research and scholarship. But Yale's comparative advantage has been innovation in its educational mission as well. Reaffirm this focus for innovation by celebrating and using the residential college system more fully in student development, by encouraging a way of teaching in STEM disciplines that increases persistence in these fields, and by promoting a broader and more flexible educational experience for graduate students in fields with constrained academic job markets. Celebrate new approaches to education/curriculum/pedagogy in our professional schools.
- To distinguish entrepreneurial activities at Yale from those promoted by other colleges and universities, explore the creation of "intellectual entrepreneurs" who become tomorrow's leaders. Intellectual entrepreneurs invent novel approaches to activities and problems in any realm from public service to non-profit work to business.

Promote Excellence in All Activities

Excellent institutions are those with a clear sense of purpose, plans to achieve those aims, and the discipline to distribute resources accordingly. We should not use a scatter-shot approach to determining areas of excellence, spreading thin our money, faculty, staff, and facilities to cover every worthy activity. We must determine our priorities for excellence and follow up with the sometimes difficult decision-making that focuses on making Yale great in those areas, rather than trying to do everything and only accomplishing adequacy.

- Develop a process of establishing priorities that ensures resources are committed to programs that are or can become exceptional. Ask whether Yale can achieve excellence in a particular activity—or, better still, be a leader—before allocating resources to it. In general, for scholarly activities, research programs, and collections either build <u>on</u> excellence or, for new activities, build <u>to</u> excellence.
- Recognize that in addition to excellence in Yale's scholarly and research activities, which is widely appreciated by the campus community, excellence must extend to <u>all</u> aspects of our educational mission. This includes pedagogy, service learning, online endeavors, academic advising, and creating a meaningful and respectful context for student life that is conducive to appropriate student development and growth (e.g., address risky drinking, sexual misconduct).
- A sense of belonging to a community is one of the strongest ingredients of a Yale education. We must do everything we can to maintain that signature of the institution. Yale can become even better in terms of how we support and respect one another, and as we have become more diverse we need to be even more intentional in drawing on the gifts of one another. Find ways to foster a sense of community and positive participation in the life of this place.
- Act on the commitment that one component of excellence in faculty, staff, and students is the diversity of each of these groups.

Appendix F

Affirmation of Compliance



New England Association of Schools and Colleges

COMMISSION ON INSTITUTIONS OF HIGHER EDUCATION

3 Burlington Woods, Suite 100, Burlington, MA 01803-4514 Voice: (781) 425 7785 Fax: (781) 425 1001 Web: <u>http://cihe.neasc.org</u>

AFFIRMATION OF COMPLIANCE WITH FEDERAL REGULATIONS RELATING TO TITLE IV

Periodically, member institutions are asked to affirm their compliance with federal requirements relating to Title IV program participation, including relevant requirements of the Higher Education Opportunity Act.

1. Credit Hour: Federal regulation defines a credit hour as an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutional established equivalence that reasonably approximates not less than: (1) One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or (2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours. (CIHE Policy 111. See also *Standards for Accreditation* 4.34.)

URL	http://catalog.yale.edu/ycps/academic-regulations/course- credits-course-loads/
Print Publications	Yale College Programs of Study – p. 41
Self-study/Fifth-year report Page Reference	p. 26

2. Credit Transfer Policies. The institution's policy on transfer of credit is publicly disclosed through its website and other relevant publications. The institution includes a statement of its criteria for transfer of credit earned at another institution of higher education along with a list of institutions with which it has articulation agreements. (CIHE Policy 95. See also *Standards for Accreditation* 4.44 and 10.5.)

URL	http://catalog.yale.edu/ycps/academic-regulations/credit-from- other-universities/
Print Publications	Yale College Programs of Study - p. 76
Self-study/Fifth-year Report Page Reference	p. 26

3. Student Complaints. "Policies on student rights and responsibilities, including grievance procedures, are clearly stated, well publicized and readily available, and fairly and consistently administered." (*Standards for Accreditation* 6.18, 10.5, and 11.8.)

	http://provost.yale.edu/uwc/procedures
	http://www.yale.edu/equalopportunity/complaint/dean-student.html
URL	http://www.yale.edu/equalopportunity/complaint/provost-student.html
	http://www.yale.edu/equalopportunity/complaint/president-student.html
	http://yalecollege.yale.edu/campus-life/undergraduate-regulations
	Yale College Undergraduate Regulations - p. 39 Yale College
Print Publications	Undergraduate Regulations are only in an online pdf at the last
	url above plus see four other above url pdfs.
Self-study/Fifth-year Report Page Reference	pp. 42-43

4. Distance and Correspondence Education: Verification of Student Identity: If the institution offers distance education or correspondence education, it has processes in place to establish that the student who registers in a distance education or correspondence education course or program is the same student who participates in and completes the program and receives the academic credit... The institution protects student privacy and notifies students at the time of registration or enrollment of any projected additional student charges associated with the verification of student identity. (CIHE Policy 95. See also Standards for Accreditation 4.42.)

		•	•	
Method(s) used for verification	NA			
Self-study/Fifth-year Report Page Reference	NA			

5. FOR COMPREHENSIVE EVALUATIONS ONLY: Public Notification of an Evaluation Visit and Opportunity for Public Comment: The institution has made an appropriate and timely effort to notify the public of an upcoming comprehensive evaluation and to solicit comments. (CIHE Policy 77.)

Self-study Page Reference NA

The undersigned affirms that <u>YALE UNIVERSITY</u> meets the above federal requirements relating to Title IV program participation, including those epimerated above.

ttosung Chief Executive Officer:

Date: 14 Augusi 2014

Appendix G

Financial Report







FINANCIAL REPORT 2012–2013

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The President and Fellows of Yale University
The Officers of Yale University

Front Cover: The Yale University Art Gallery, the oldest college art museum in the United States, was founded in 1832 when the patriot-artist John Trumbull gave more than one hundred of his paintings to Yale College. Since then its collections have grown to more than 200,000 objects ranging in date from ancient times to the present.

In December 2012, the Gallery celebrated the grand opening of the renovated and expanded museum. This important initiative, which was accompanied by parallel growth in the museum's holdings, enabled the Gallery not only to enhance its role as one of the nation's preeminent teaching institutions, but also to join the ranks of the country's leading public art museums. The completed expansion and renovation project united its three buildings – the landmark Louis Kahn building (1953), the Old Yale Art Gallery building (1928), and Street Hall (1866) – into a cohesive whole with a rooftop addition by Ennead Architects (2012). *Photography by Elizabeth Felicella*

Highlights

	Fiscal years						
Five-Year Financial Overview (\$ in millions)	2013	2012	2011	2010	2009		
Net Operating Results–Management View	\$ 15.7	\$ 67.3	\$ 109.7	\$ 115.6	\$ 68.8		
Financial Position Highlights:							
Total assets	\$ 31,265.2	\$31,322.4	\$ 31,044.3	\$27,296.1	\$ 25,937.8		
Total liabilities	8,808.3	10,830.7	10,045.8	9,755.4	8,543.3		
Total net assets	\$22,456.9	\$20,491.7	\$20,998.5	\$17,540.7	\$ 17,394.5		
Endowment:							
Net investments, at fair value	\$20,708.8	\$19,264.3	\$ 19,174.4	\$16,504.2	\$ 16,103.5		
Total return on investments	12.5%	4.7%	21.9%	8.9%	(24.6%)		
Spending from endowment	5.3%	5.1%	5.9%	6.9%	5.2%		
Facilities:							
Land, buildings and equipment, net							
of accumulated depreciation	\$ 4,347.3	\$ 4,254.7	\$ 4,109.8	\$ 3,975.8	\$ 3,715.1		
Disbursements for building projects	277.0	284.5	280.7	407.1	599.6		
Debt	\$ 3,594.4	\$ 4,108.0	\$ 4,041.5	\$ 4,054.5	\$ 3,376.0		
Statement of Activities Highlights:							
Operating revenues	\$ 2,936.9	\$ 2,818.6	\$ 2,787.7	\$ 2,725.8	\$2,600.7		
Operating expenses	2,976.1	2,812.8	2,684.0	2,572.1	2,493.5		
(Decrease) increase in net assets from							
operating activities	\$ (39.2)	\$ 5.8	\$ 103.7	\$153.7	\$107.2		
Five-Year Enrollment Statistics	2013	2012	2011	2010	2009		
Yale College term bill	\$ 55,300	\$ 52,700	\$ 49,800	\$ 47,500	\$ 46,000		
Freshman Enrollment Class of:	'16	'15	'14	'13	'12		
Freshman applications	28,977	27,283	25,869	26,003	22,817		
Freshmen admitted	2,043	2,109	2,039	1,958	1,952		
Admissions rate	7.1%	7.7%	7.9%	7.5%	8.6%		
Freshman enrollment	1,356	1,351	1,344	1,307	1,320		
Yield	68.4%	65.2%	67.0%	67.8%	68.7%		
Total Enrollment:							
Yale College	5,399	5,345	5,296	5,268	5,266		
Graduate and professional schools	6,424	6,440	6,321	6,252	6,107		

Message from the Vice President for Finance and Business Operations

Yale University finished the year ending June 30, 2013, with continued excellence and impressive achievement in its core mission of teaching and research. With a strong balance sheet to support its future, Yale continues to adjust its operations to a new fiscal reality and the remaining effects of the endowment's substantial drop in 2008-09.

Highlights from the Year

Perhaps the most significant highlight of the year was a transition in the institution's leadership. Yale wished a hearty farewell to Richard Levin, its president for twenty years, and welcomed Peter Salovey–who had previously served as provost, dean of Yale College, and dean of the graduate school–as Yale's 23rd president. Shortly thereafter, President Salovey named Benjamin Polak as Yale's new provost, a central figure in setting the University's academic and financial direction. In addition, the Yale Corporation, Yale's governing board, named Margaret Marshall as senior fellow, the first woman to hold this important position. The leadership transition has been a smooth one, and the University has continued to move forward with excellence to advance, disseminate, and preserve knowledge.

Among the other highlights for the year were a record nine Yale College students named as Rhodes Scholars and three faculty members named to the National Academy of Sciences. Yale opened its new Energy Sciences Institute, initiated renovations of the Sterling Chemistry Laboratory and the nave of the Sterling Memorial Library, and completed the breathtaking renovation of the Yale University Art Gallery. The campus was filled with other exciting accomplishments in teaching, research, and practice in the Faculty of Arts and Sciences, and the schools of Medicine, Law, Management, Forestry and Environmental Sciences, Divinity, Nursing, Drama, Music, Architecture, and Art.

These accomplishments and many more were the result of our exceptional faculty, students, and staff as well as incredibly generous alumni and other benefactors. This generosity has continued into the 2013-14 fiscal year with President Salovey's announcement of the largest gift in Yale University history, \$250 million from Charles B. Johnson '54, to build two new residential colleges and increase undergraduate enrollment by 15%–the first expansion of Yale College since 1969. For more information on this and other exciting news please visit news.yale.edu.

Strong Balance Sheet

2

Yale remains financially strong, blessed with a robust balance sheet thanks to the \$20.8 billion Yale Endowment managed by the Investments Office led by David Swensen. In 2013, Yale's balance sheet strengthened further, with net assets growing by \$2.0 billion or 10% for the year, driven by a strong 12.5% endowment return as well as the repayment of \$900 million in debt. From a balance sheet perspective, this was a terrific year.

In addition to the obvious strength of the Yale Endowment, Yale's balance sheet remained strong in two areas that might be less apparent. Universities spend the overwhelming majority of their financial resources on buildings and people. Overall, the condition of Yale's buildings—including the signature residential colleges, its magnificent museums and libraries, and the many other academic and administrative buildings on campus—are in excellent shape, thanks to Yale's established discipline of setting aside enough capital replacement funds each year in our operating budget for building renovations. This has allowed Yale, after a concerted two decade-long effort, to reach the point where its building stock is roughly in equilibrium. This is no small accomplishment. Deferred maintenance on buildings was a serious issue at Yale several decades ago, and, if unattended, it would have represented a hidden liability amounting to billions of dollars, albeit unrecorded on a public balance sheet. The fact that Yale no longer faces the type of deferred maintenance liability so common in higher education is now a hidden asset, but a real one.

Regarding the cost of people working at Yale, our outstanding faculty and staff, most outlays, like salaries, wages and benefits, are funded as they are incurred. Cash is expended throughout the year as people are paid for their services to the University. However, like many other universities, we also have significant obligations for retirement plans with defined future pension benefits and support for retiree health care. The payments for these benefits will be made over long time frames (decades), so securing the funds to meet these future obligations requires ongoing and responsible stewardship. These types of liabilities have received a lot of press recently, particularly related to the challenges facing federal, state, and

municipal governments. Yale has roughly \$2 billion of liabilities associated with its retirement plans. We have been and remain committed to funding these plans at responsible levels. As with many organizations, Yale's level of funding for its defined benefit plans for retirees (assets set aside as a percent of the outstanding liabilities) dropped considerably with the twin events of the stock market decline in 2008-09 and record-low interest rates. We have continued on a responsible path of contributing additional funds each year. This year, thanks to continued funding, strong investment returns, and rising interest rates, Yale's overall funding levels improved by over \$200 million.

In short, Yale remains a place with ample resources to support its varied and important mission.

Continued Repositioning of Operations

With a balance sheet that remains strong and grew even stronger this year we are continuing the work to improve Yale's operating results which were significantly impacted by the endowment's decline in 2008-09.

For the year ending June 30, 2013, Yale is reporting a small deficit (\$39 million or about 1% of revenue). We are continuing to take actions to reposition Yale's operations, adjusting expenses to match the drop in expected revenue resulting from the endowment's decline in 2008-09. Yale has already made substantial adjustments in this regard. Five years ago we were projecting annual deficits for this point in time, absent any action, of \$350 million. We have traveled much of the way, and the work to close the remaining gap is underway.

Yale's ongoing goal, challenge, and great opportunity is to align our resources to support an exciting and positive vision for the future of this wonderful place. With a new president at the helm, this is an opportune time to define what Yale's vision will be. President Salovey has already begun to describe what he envisions as a "more unified, accessible, innovative, and altogether excellent Yale." A balanced budget is an essential means to this vital end, including providing resources to invest in new areas of exploration and innovation that are the lifeblood of a major research university.

Yale's decision in the wake of the endowment decline was to neither over- nor under-react to what was an unprecedented and sudden fall. Yale, excluding its medical school, is more reliant on endowment income than nearly any other major research university, and thus the impacts felt at Yale were significant. Our approach was to adjust to the decline over a multi-year period in order to shield the core activities of teaching and research as much as possible from the downturn. We delayed many new programs imagined but did not eliminate existing ones, and we continued to expand research and invest in clinical activities because of great opportunities for Yale's exceptional scientists and clinicians.

Five years after the endowment's decline, Yale has ample resources to carry out its mission with excellence for years to come, and we are identifying ways to reposition the costs of operating Yale in line with expected revenue growth. We are well along the way and are heartened by the outstanding character, intellect, and collaboration present on campus among faculty and staff that will be essential to making this happen. This is an important challenge to address, but one that with a handful of choices–in support of a positive and exciting vision–is readily achievable at Yale.

I look forward to reporting our progress in future years, and I remain confident Yale will emerge an even stronger place that continues to educate exceptionally talented men and women from across the nation and around the world for leadership in scholarship and society.

Shauna Ryan King Vice President for Finance and Business Operations

Financial Results

Overview

The University manages its operations to achieve long-term financial equilibrium. It is committed to sustaining both the programs and the capital assets (Endowment and facilities) supporting those programs over multiple generations. Endowment income, Yale's largest source of revenue, is allocated to the Operating Budget based on a spending policy that preserves the Endowment asset values for future generations, while providing a robust revenue stream for current programs. Similarly, the Operating Budget provides the major portion of the funds needed, through the Capital Replacement Charge (CRC), to replenish the capital base necessary to ensure that buildings are maintained to support current programs.

The Consolidated Statement of Activities in the audited financial statements is presented in accordance with generally accepted accounting principles (GAAP). GAAP recognizes revenue when earned and expenses when incurred. The Management View is focused more on resources available and used in the fiscal period presented. The Management View does not include certain expenses that are paid out over the long term, such as unused vacation time, and certain revenue that will not be received within the next fiscal year, such as pledged contribution revenue. Another significant difference is that the Management View treats the CRC as an expense rather than the historical cost depreciation expensed in the Consolidated Statement of Activities. The GAAP financial statements do not present fund balance transfers between the operating, physical, and financial categories, as the Management View does. A summary of the differences between the Management View and GAAP presentations of the University's net operating results is as follows (\$ in thousands):

	2013	2012
Total net operating results	\$ 15,704	\$ 67,268
Operating pledge activity	(11,005)	4,331
Expenses related to long-term liabilities	(88,901)	(77,475)
Capital funding:		
CRC in excess of depreciation	7,747	1,350
CRC funded by capital gifts	(26,585)	(26,048)
CRC used for non-capital costs	(13,179)	(13,348)
Interest hedge realized loss	46,340	44,811
Energy hedge realized loss	11,900	17,432
Funding transfers	18,725	(12,461)
(Decrease) increase in net assets		
from operations per the		
Consolidated Statement of Activities	\$(39,254)	\$ 5,860

The Management View presents operating activity by funding source. The category "General Appropriations" includes the cost of education for the University. The category "Other" includes programs supported by endowments and gifts, sponsored research, patient care, and other revenue sources. Endowment and gift activities are separated to facilitate and monitor the University's fiduciary responsibility for compliance with donor intentions for restricted activity. Sponsored research includes the funding from federal, state, and non-governmental entities and the direct costs of the related research. Other activity includes health services provided by the Yale Medical Group as part of Yale's role in the Academic Health Center of Yale-New Haven Health Systems.

Yale University Operating Results – Management View for the year ended June 30, 2013 (\$ in thousands)

	General		Actual	Actual	
	Appropriations	Other	June 30, 2013	June 30, 2012	
Revenues:					
Tuition, room and board–gross	\$ 505,439	\$ 13,342	\$ 518,781	\$ 493,726	
Tuition discount	(199,663)	(46,678)	(246,341)	(238,172)	
Tuition, room and board–net	305,776	(33,336)	272,440	255,554	
Grants and contract income	170,942	509,357	680,299	699,265	
Medical services income	46,767	568,843	615,610	541,416	
Contributions	61,736	73,049	134,785	115,056	
Endowment income	719,460	304,548	1,024,008	994,244	
Investment and other income	101,422	140,019	241,441	242,248	
Total external income	1,406,103	1,562,480	2,968,583	2,847,783	
Expenses:					
Faculty salaries	198,662	491,260	689,922	627,984	
All other salaries	423,583	286,627	710,210	679,533	
Employee benefits	182,944	230,914	413,858	386,665	
Total salaries and benefits	805,189	1,008,801	1,813,990	1,694,182	
Fellowships and stipends	35,079	53,444	88,523	84,133	
Non-salary expenses	232,615	488,532	721,147	712,647	
Interest, CRC and other amortization	297,065	13,429	310,494	302,014	
Total expenses	1,369,948	1,564,206	2,934,154	2,792,976	
Transfers	(30,837)	12,112	(18,725)	12,461	
Total net operating results	\$ 5,318	\$ 10,386	\$ 15,704	\$ 67,268	

Fiscal Year 2013 Management View Results

The University ended the year with an increase to its operating fund balances of \$16 million. Actual operating revenues increased 4.2% and actual operating expenses, excluding transfers, increased 5.1% compared to 2012. Medical services income and faculty salaries were significantly higher than the prior year, as the School of Medicine clinical practice grew at a rapid pace. Revenues were also higher in tuition, room and board, endowment income, and contributions. Grants and contracts income was lower than prior year primarily due to a decline in funding related to federal grants under the American Recovery and Reinvestment Act.

Operating Revenue

As shown in the chart below, the University derives its operating revenue from seven main sources: student income (net of certain scholarships and fellowships), grants and contracts, medical services, endowment income, other income and investment income, contributions, and publication income.



Net Tuition, Room and Board

Tuition, room and board totaled \$518.8 million in 2013, an increase of 5.1% from 2012. Of this amount, \$447.0 million represents tuition, a 4.9% increase over 2012 and \$71.8 million represents revenue from room and board which increased 6.3% from 2012. In accordance with generally accepted accounting principles, student income is presented net of certain scholarships and fellowships, which totaled \$247.8 million and \$247.1 million for 2013 and 2012, respectively. Net tuition, room and board represents 9.2% of the University's operating revenues in 2013 compared to 8.8% in 2012.

During the 2012–2013 academic year, 11,823 students were enrolled at the University; 5,399 were undergraduate students attending programs at Yale College, and 6,424 were pursuing their studies at the Graduate School of Arts and Sciences and the twelve professional schools. (Figures are based on full-time equivalents.)

Students enrolled in Yale College paid \$42,300 for tuition and \$13,000 for room and board, bringing the total term bill to \$55,300 for the 2012-2013 academic year. The increase in the Yale College term bill was 4.9% over the 2011–2012 academic year. Students enrolled in the Graduate School of Arts and Sciences paid \$35,500 for tuition, a 2.9% increase over the 2011–2012 academic year.

The University maintains a policy of offering Yale College admission to qualified applicants without regard to family financial circumstances. This "need-blind" admission policy is supported with a commitment to meet in full the demonstrated financial need of all students throughout their undergraduate years.

During the 2012-13 academic year, 2,997 undergraduates, representing 54.9% of eligible Yale College enrollment, received financial aid. In the Graduate School of Arts and Sciences, 2,879 students, or 98.3% of those eligible, received financial aid. In the professional schools, 3,029 students, or 82.6% of those eligible, received financial aid. In all, 8,905 University students, or 73.9% of total University eligible enrollment, received some form of University-administered student aid in the form of loans, gifts, or a combination of both loans and gifts.

Grant and Contract Income

Grant and contract income experienced a 2.7% decrease from \$699.3 million in 2012 to \$680.3 million in 2013. The Yale School of Medicine, which received 79% of the University's grant and contract income in fiscal 2013, reported a decrease of 3.3% for 2013, while the remaining University sectors had a decrease of 0.6%.

The federal government funded \$535.8 million, or 78.8% of 2013 grant and contract income, in support of Yale's research and training programs. The largest federal sponsor was the Department of Health and Human Services, which provided revenue of \$393.2 million during 2013, a decrease of 6.2% compared to the prior year. The University also receives significant research funding from the National Science Foundation, the

Department of Energy, the Department of Defense, and student aid awards from the Department of Education. Nonfederal sources, which include foundations, voluntary health agencies, corporations, and the State of Connecticut, provided an additional \$144.5 million in research, training, clinical, and other sponsored agreements during 2013.

Grants under the American Recovery and Reinvestment Act of 2009 provided \$151M of funding, since the program began. There was a \$21M decrease from fiscal 2012 to 2013, and there is minimal funding remaining for 2014.

In addition to the reimbursement of direct costs charged to sponsored awards, sponsoring agencies reimburse the University for its facilities and administrative costs (referred to as indirect costs), which include costs related to research laboratory space, facilities, and utilities, as well as administrative and support costs incurred for sponsored activities. These reimbursements for facility and administrative costs amounted to \$171.7 million in 2013. Recovery of facility and administrative costs associated with federally sponsored awards is recorded at rates negotiated with the University's cognizant agency, the Department of Health and Human Services. Yale's current rate agreement is effective through June 30, 2014.

Medical Services Income

Grant and Contract Income

Medical services income totaled \$615.6 million in fiscal 2013, an increase of 13.7% from 2012, and represented 21% of the University's operating revenue. The largest portion of this revenue stream (approximately \$580.1 million) is derived from medical services provided by the School of Medicine's Yale Medical Group



(YMG), one of the largest academic multi-specialty practices in the country and the largest in Connecticut.

Many School of Medicine departments saw double-digit increases in medical services revenues during fiscal year 2013 including the Cancer Center, Emergency Medicine, Internal Medicine-Cardiology Section, Neurology, Neurosurgery, Therapeutic Radiology and Urology. Total Yale New Haven Hospital funding increased 19% to \$181 million mainly related to the Yale Cancer Center (merger with a community oncology group and increased support to Hematology) and Internal Medicine (due to expansion in Cardiology).

The implementation of an electronic health record system across YMG and Yale-New Haven Health System continued into 2013 with most of the departments converting as of April 2013. The School of Medicine continued its focus on improving clinical research as well as ensuring compliance. New systems continued to be implemented during 2012-2013 to manage clinical trials and clinical research billing. Staffing to support clinical trials, patient care and data management increased.



Medical Services Income Eight-year trend analysis (\$ in millions)

Allocation of Endowment Spending

Each year a portion of accumulated Endowment investment returns is allocated to support operational activity. This important source of revenue represents 34.7% of total operating income this year and it remains the largest source of operating revenue for the University. The level of spending is computed in accordance with an Endowment spending policy that has the effect of smoothing year-to-year market swings. Endowment investment returns allocated to operating activities increased by 2.8% in 2013 to \$1,018.7 million. Additional information on the Endowment spending policy is provided in the Endowment section of this report and in the Notes to the Consolidated Financial Statements.

Contributions

Donations from individuals, corporations and foundations represent a vitally important source of revenue for the University. Gifts to the University provide necessary funding for current operations, for long-term investments in the University's physical infrastructure and, in the case of gifts to the Endowment, to provide permanent resources for core activities for future



Allocation of Endowment Spending as a percentage of total revenues, ten-year trend analysis generations. Gifts made by donors to support the operations of the University are reflected as contribution revenue in the operating section of the Consolidated Statement of Activities whereas gifts to the University's Endowment and for building construction and renovation are reflected as contribution revenue in the nonoperating section. In aggregate, contributions included in the University consolidated financial statements total \$289.9 million in 2013 compared to \$284.8 million in 2012.

Certain gifts commonly reported in fund-raising results are not recognized as contributions in the University consolidated financial statements. For example, "in-kind" gifts such as works of art and books are not recognized as financial transactions in the University consolidated financial statements. Grants from private, non-governmental sources (i.e., corporations and foundations) reported as gifts for fund-raising purposes are included in the Consolidated Statement of Activities as grant and contract income. Generally accepted accounting principles require the University to recognize outstanding future donor commitments as institutional receivables. These anticipated future payments (i.e., donor commitments) are not counted as contributions received in accordance with fund-raising industry-standard guidelines.

Investment and Other Income

Investment and other income includes \$64.0 million of interest, dividends, and gains on non-Endowment investments and \$132.1 million of royalty income, admissions revenue, parking revenue, special event and seminar fees, application and enrollment fees, and a variety of other sources.

Publications Income

Publications income is primarily generated through Yale University Press (Press), a separately endowed department of the University. The Press published over 400 titles in 2013. The Press' authors are academic and other professionals from around the world. Publishing-related revenue for the Press decreased by 10.9% or \$3.8 million.

Operating Expenses

Operating expenses totaled \$3.0 billion for 2013, representing a 5.8% increase for the year. With 4,140 faculty, 1,089 postdoctoral associates, 4,195 managerial and professional staff, and 5,128 unionized clerical, technical, service, and maintenance personnel, personnel costs are the single largest component (63%) of the University's total operating expenses. (Headcounts represent full-time equivalents as of fall 2012.)

Personnel costs were \$1,882.3 million in 2013, an 8.3% increase over 2012. Faculty salary expenses increased 11.6% driven primarily by growth in clinical activities and staff compensation increased 1.6% from 2012 to 2013. These increases were in line with the University's overall plans to maintain moderate growth and a competitive position with peer institutions.

The cost of providing employee benefits, including various pension, post-retirement health, and insurance plans in addition to Social Security and other statutory benefits, increased by approximately 11.7% to \$492.9 million.

Non-salary expenses include services, materials and supplies, and other expenses and totaled \$673.7 million in 2013, a decrease of 0.8% from 2012.

In accordance with generally accepted accounting principles, Yale reports its operating expenses by functional classification in the Consolidated Statement of Activities. Expenses in each classification increased primarily as a result of the personnel increases mentioned above.



The University spends 51.2% of its operating resources on academic activities including libraries as well as student aid and services. Organized research represents 16.4% and patient care 19.9% of spending. Organized research and patient care activities are integral to the academic and learning experiences at the University.

Physical Capital

Capital spending on facilities in fiscal year 2013 totaled \$277.0 million. This represents a decrease of 2.6% from the 2012 spending level and a significant favorable variance to the 2013 capital budget for facilities. Over the past four years, the University has reshaped its capital plan in response to the national economic downturn in 2008 and continues to act prudently when evaluating the need for maintenance and programmatic renovations. The capital plan will proceed at a slower pace until greater funding becomes available.

Consistent with last year, the largest share of the University's capital spending, 22%, was used to fund the construction of Edward P. Evans Hall–a new campus for the School of Management. While the glass exterior and infrastructure were largely completed in 2013, construction is still underway on the classrooms and other interior finishes. The 16 classrooms, which are specifically designed to maximize interactive learning due to their elliptical shape, will contain advanced video equipment allowing faculty and students to communicate with business experts at different locations in real time which complements the school's efforts to globalize its



Operating Expenses by Functional Classification

curriculum. The building is scheduled to open in January 2014.

Fifteen percent of the University's capital spending was allocated to administrative building projects for planned capital maintenance and the support of programmatic initiatives. In 2013, work was performed at 12 locations throughout the central campus to correct exterior façade deterioration, supporting the University's commitment to maintaining its buildings to avoid deferred maintenance issues.

Thirteen percent of the University's capital spending for 2013 was used to fund science buildings. This includes a comprehensive renovation of the exterior envelope, mechanical, electrical and plumbing systems and labs in Kline Chemistry Laboratory, and other smaller scale renovations and required maintenance in Sloan Physics Laboratory and Sterling Chemistry Laboratory.

The University also made a significant investment in its West Campus with the comprehensive renovation of roughly 77,000 square feet of vacant space to accommodate the relocation of the School of Nursing. One of the building's main features, the "hub", is on the first floor. The hub, an area with tables, a refrigerator and vending machines, is where students and faculty can gather when they are not in class. The first floor also has one of two very large classrooms, accommodating up to 120 people. The lower level, offers additional classrooms, laboratory space and a mock hospital room where students can train while being observed by faculty in an adjacent room. Faculty and staff offices fill the two upper floors of the building. Other investments in West Campus were made to support various research, technology and art conservation programs. The total investment equaled 13% of the University's capital spending for the year.





Capital spending was also concentrated in the School of Medicine with investments in research support and capital maintenance. The School of Medicine accounted for approximately 12% of the University's 2013 capital expenditures. Major capital spending included comprehensive renovations to the 7th floor of the Laboratory of Epidemiology and Public Health and the 4th and 6th floors of the Clinic Building. The remaining expenditures related to other programmatic renovation and capital maintenance projects throughout the School.

The University's renovation and building plans were funded by a combination of gifts, debt, and funds from the operating budget. The University continues to rely heavily on the extraordinary generosity of its alumni and friends. Gifts for facilities in 2013 totaled \$75.6 million. The University has been the beneficiary of an outstanding response from donors. The design for the new residential colleges 13/14, the School of Management –Evans Hall, the Yale University Art Gallery, Becton Center for Engineering, Sterling Memorial Library Nave Restoration, West Campus W-A21 Building, and indeed, nearly all of the University's recent major capital projects have been funded at least partially through gifts.

The major source of funding for the capital program is debt provided through the Connecticut Health and Facilities Authority (CHEFA) which allows the University to borrow at tax exempt rates. This funding source is critical to keeping the cost of funding

at lower levels which allows the University to maximize the use of its resources in the fulfillment of its mission of teaching and research. The University exhausted the bond proceeds from the \$450 million issued in Fiscal Year 2010 through CHEFA to finance planned renovation and capital additions. The University continues to receive the highest bond ratings available: AAA from Standard and Poor's and Aaa from Moody's.

Endowment

The Endowment provides the largest source of support for the academic programs of the University. To balance current and future needs, Yale employs investment and spending policies designed to preserve Endowment asset values while providing a substantial flow of income to the Operating Budget. At June 30, 2013, net assets in the Endowment totaled approximately \$20.8 billion, after the allocation of Endowment spending of \$1.0 billion to the Operating Budget during the year.

Investment Performance

For the fiscal year ending June 30, 2013, the Endowment earned a 12.5% investment return. During the past decade, the Endowment earned an annualized 11.0% return, which added \$5.0 billion of value relative to a composite passive benchmark and \$7.0 billion relative to the mean return of a broad universe of colleges and universities.

Endowment Spending

The Endowment spending policy, which allocates Endowment earnings to operations, balances the competing objectives of providing a stable flow of income to the Operating Budget and protecting the real value of the Endowment over time. The spending policy manages the trade-off between these two objectives by using a long-term target spending rate combined with a smoothing rule, which adjusts spending in any given year gradually in response to changes in Endowment market value.

The target spending rate approved by the Yale Corporation currently stands at 5.25%. According to the smoothing rule, Endowment spending in a given year sums to 80% of the previous year's spending and 20% of the targeted long-term spending rate applied to the market value two years prior. The spending amount determined by the formula is adjusted for inflation and constrained so that the calculated rate is at least 4.5%, and not more than 6.0% of the Endowment's market value. The smoothing rule and the diversified nature of the Endowment mitigate the impact of short-term market volatility on the flow of funds to support Yale's operations.

Asset Allocation

Asset allocation proves critical to successful Endowment performance. Yale's asset allocation policy combines tested theory and informed market judgment to balance investment risks with the need for high returns.

Both the need to provide resources for current operations and the desire to preserve the purchasing power of assets dictate investing for high returns, which leads the Endowment to be weighted toward equity. In addition, the Endowment's vulnerability to inflation directs the University away from fixed income and toward equity instruments. Hence, over 90% of the Endowment is invested in some form of equity, through domestic and international securities, real assets, and private equity.

Over the past twenty years, Yale significantly reduced the Endowment's exposure to traditional domestic marketable securities, reallocating assets to nontraditional asset classes. In 1993, just under half of the Endowment was committed to U.S. stocks, bonds, and cash. Today, domestic marketable securities account for approximately one-tenth of the portfolio, and foreign equity, private equity, absolute return strategies, and real assets represent nearly nine-tenths of the Endowment.



Growth of \$1,000 Invested in the Yale Endowment 2003 – 2013 The heavy allocation to nontraditional asset classes stems from the diversifying power they provide to the portfolio as a whole. Alternative assets, by their nature, tend to be less efficiently priced than traditional marketable securities, providing an opportunity to exploit market inefficiencies through active management. Today's portfolio has significantly higher expected returns and lower volatility than the 1993 portfolio.

Asset Class	June 30, 2013	Current Target
Absolute Return	17.8%	20.0%
Domestic Equity	5.9%	6.0%
Fixed Income	4.9%	5.0%
Foreign Equity	9.8%	11.0%
Private Equity	32.0%	31.0%
Real Estate	20.2%	19.0%
Natural Resources	7.9%	8.0%
Cash	1.5%	0.0%
Total	100.0%	100.0%





Yale Endowment Annualized Returns vs. Benchmarks by Asset Class Net of fees, ten years ended June 30, 2013



Active Benchmarks

Absolute Return: Dow Jones Credit Suisse Composite Domestic Equity: Frank Russell Median Manager, U.S. Equity Fixed Income: Frank Russell Median Manager, Fixed Income Foreign Equity: Frank Russell Median Manager Composite, Foreign Equity Private Equity: Cambridge Associates Composite Real Estate: Cambridge Associates Real Estate Natural Resources: Cambridge Associates Natural Resources

Passive Benchmarks

- Absolute Return: Barclays 9-12 Mo Treasury
- Domestic Equity: Wilshire 5000
- Fixed Income: Barclays 1-5 Yr Treasury

Foreign Equity: MSCI EAFE Investable Market Index / MSCI Emerging Markets Investable Market Index + MSCI China A-Shares / Custom Opportunistic Benchmark, weighted according to target emerging, developed, and opportunistic equity allocations

- Private Equity: Russell 2000 (50%)/ Russell 2000 Technology (25%)/ MSCI ACWI ex-US Small-Cap Index (25%)
- Real Estate: MSCI REIT Index

Natural Resources: Custom Timber REIT basket / S&P OG Exploration & Production Index / HSBC Global Mining Index, weighted according to target timber, oil and gas, and mining allocations

Summary

Yale continues to rely on the principles of equity orientation and diversification. These principles continue to guide Yale's investment strategy, as equity orientation makes sense for investors with long horizons and diversification allows the construction of portfolios with superior risk and return characteristics. The University's equity-oriented, well-diversified portfolio positions the Endowment for long-term investment success.



Independent Auditor's Report

To the President and Fellows of Yale University:

We have audited the accompanying consolidated financial statements of Yale University (the "University"), which comprise the consolidated statement of financial position as of June 30, 2013, and the related consolidated statements of activities and of cash flows for the year then ended.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the University's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the University at June 30, 2013, and the changes in its net assets and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have previously audited Yale University's 2012 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 23, 2012. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2012 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Pricewaterhouse Coopers LLP

Hartford, Connecticut October 24, 2013

Yale University Consolidated Statement of Financial Position June 30, 2013 with comparative totals for June 30, 2012 (\$ in thousands)

	2013	2012
Assets:		
Cash and cash equivalents	\$ 289,102	\$ 533,002
Accounts receivable, net	182,376	152,121
Contributions receivable, net	419,456	467,027
Notes receivable	128,484	124,632
Investments, at fair value	25,740,975	25,638,610
Other assets	157,561	152,245
Land, buildings and equipment, net of accumulated depreciation	4,347,257	4,254,728
Total assets	\$ 31,265,211	\$ 31,322,365
Liabilities:		
Accounts payable and accrued liabilities	\$ 367,341	\$ 320,617
Advances under grants and contracts and other deposits	89,342	85,262
Other liabilities	952,541	1,157,442
Liabilities under split-interest agreements	101,697	87,612
Bonds and notes payable	3,594,420	4,108,001
Liabilities associated with investments	3,670,313	5,038,264
Advances from Federal government for student loans	32,674	33,490
Total liabilities	8,808,328	10,830,688
Net assets: non-controlling interests	182,693	108,756
Net assets: Yale University	22,274,190	20,382,921
Total net assets	22,456,883	20,491,677
Total liabilities and net assets	\$ 31,265,211	\$ 31,322,365

Detail of net assets:

		Temporarily	Permanently		
	Unrestricted	Restricted	Restricted	2013	2012
Non-operating:					
Endowment and funds functioning as endowment	\$ 3,117,661	\$ 14,507,907	\$ 3,167,254	\$ 20,792,822	\$19,379,108
Student loans	9,852	-	33,692	43,544	40,201
Physical capital investment	760,043	437,227	-	1,197,270	945,114
Defined benefit plan deficit	(309,915)	-	-	(309,915)	(616,765)
Operating	232,831	317,638	-	550,469	635,263
Net assets: Yale University	3,810,472	15,262,772	3,200,946	22,274,190	20,382,921
Net assets: non-controlling interests	182,693	-	-	182,693	108,756
Total net assets	\$ 3,993,165	\$ 15,262,772	\$ 3,200,946	\$ 22,456,883	\$20,491,677

The accompanying notes are an integral part of these consolidated financial statements.

Yale University Consolidated Statement of Activities June 30, 2013 with comparative totals for the year ended June 30, 2012 (\$ in thousands)

	· 1	Temporarily	Permanently		
	Unrestricted	Restricted	Restricted	2013	2012
Demaing					
Not tuition, room and heard	¢	¢	¢	¢	¢
Net tuition, room and board	\$ 271,003	э –	ф –	\$ 271,003	\$ 240,070
Grant and contract income, primarily for research and training	680,261	-	-	680,261	699,266
Medical services income	615,611	-	-	615,611	541,416
	33,871	89,909	-	123,780	119,632
Allocation of endowment spending from financial capital	312,398	706,284	-	1,018,682	990,965
Other investment income	55,704	8,327	-	64,031	49,691
Publications income	31,423	-	-	31,423	35,176
Other income	132,087	-	-	132,087	135,789
Total revenues	2,132,358	804,520	-	2,936,878	2,818,605
Net assets released from restrictions	831,196	(831,196)	-	-	
Total revenues and reclassifications	2,963,554	(26,676)	-	2,936,878	2,818,605
Expenses:					
Instruction and departmental research	856,132	-	-	856,132	797,759
Organized research	489,029	-	-	489,029	508,920
Patient care and other related services	593,627	-	-	593,627	502,493
Libraries and other academic support	293.602	-	-	293,602	271.879
Student aid and services	374.655	-	-	374.655	358,186
Public service	149.826	-	-	149.826	131.964
Administration and other institutional support	219,261	-	-	219,261	241,544
Total expenses	2.976.132	-		2.976.132	2.812.745
(Decrease) increase in net assets from operating activities	(12,578)	(26,676)	-	(39,254)	5,860
				(577 517	
Non-operating					
Contributions	3,159	27,126	135,873	166,158	165,183
Total endowment return	381,527	1,907,237	6,061	2,294,825	877,883
Allocation of endowment spending to operations	(167,758)	(854,217)	3,293	(1,018,682)	(990,965)
Other Investment gain (loss)	186,314	16,660	-	202,974	(414,651)
Change in funding status of defined benefit plans	306,850	-	-	306,850	(160,162)
Other (decreases) increases	(58,153)	33,257	3,294	(21,602)	(21,961)
Net assets released from restrictions	30,955	(30,955)	-	-	-
Increase (decrease) in non-operating activities	682,894	1,099,108	148,521	1,930,523	(544,673)
Total increase (decrease) in net assets -Yale University	670,316	1,072,432	148,521	1,891,269	(538,813)
Change in non-controlling interests	73,937	-	-	73,937	31,987
Total increase (decrease) in net assets	744,253	1,072,432	148,521	1,965,206	(506,826)
Net assets, beginning of year	3,248,912	14,190,340	3,052,425	20,491,677	20,998,503
Net assets, end of year	\$ 3,993,165	\$ 15,262,772	\$ 3,200,946	\$ 22,456,883	\$20,491,677

The accompanying notes are an integral part of these consolidated financial statements.

	2013	2012
Operating activities:		
Change in net assets	\$ 1,965,206	\$ (506,826)
Adjustments to reconcile change in net assets to net cash		
used in operating activities:		
Depreciation and amortization	244,596	232,996
Unrealized (gain) loss on other investments	(199,212)	388,543
Net Endowment investment gain	(1,893,258)	(501,255)
Change in non-controlling interests	(73,937)	(31,987)
Restricted contributions	(166,158)	(171,278)
Contributed securities	(79,818)	(67,782)
Other adjustments	(9,549)	(21,086)
Changes in assets and liabilities that provide (use) cash:		
Accounts receivable	(30,255)	(1,489)
Contributions receivable	46,037	178,327
Other operating assets	3,782	4,238
Accounts payable and accrued expenses	26,646	12,849
Advances under grants and contracts and other deposits	4,080	(5,465)
Other liabilities	(204,901)	245,044
Net cash used in operating activities	(366,741)	(245,171)
Investing activities:		
Student loans repaid	12.266	8.272
Student loans granted	(15.487)	(15,527)
Purchases related to capitalized software costs and other assets	(23.809)	(21.037)
Proceeds from sales and maturities of investments	7.237.708	7.122.850
Purchases of investments	(6.429.559)	(6.543.696)
Purchases of land, buildings and equipment	(309.768)	(427.621)
Net cash provided by investing activities	471.351	123.241
r		
Financing activities:		
Proceeds from restricted contributions	147,373	165,183
Contributions received for split-interest agreements	15,169	6,095
Payments made under split-interest agreements	(10,510)	(10,407)
Proceeds from long-term debt	-	102,000
Repayments of long-term debt	(501,234)	(25,136)
Interest earned and advances from Federal government for student loans	692	723
Net cash (used in) provided by financing activities	(348,510)	238,458
Net (decrease) increase in cash and cash equivalents	(243,900)	116,528
Cash and cash equivalents, beginning of year	533,002	416,474
Cash and cash equivalents, end of year	\$ 289,102	\$ 533,002

The accompanying notes are an integral part of these consolidated financial statements.

Yale University Notes to Consolidated Financial Statements

1. Significant Accounting Policies

a. General

Yale University ("the University") is a private, not-for-profit institution of higher education located in New Haven, Connecticut. The University is governed by the Yale Corporation (the "Corporation"), a body of nineteen Trustees consisting of the President, ten Successor Trustees who are Successors to the original Trustees, six Alumni Fellows, and the Governor and Lieutenant Governor of Connecticut, ex officio.

The University provides educational services primarily to students and trainees at the undergraduate, graduate and postdoctoral levels, and performs research, training and other services under grants, contracts and other similar agreements with agencies of the Federal government and other sponsoring organizations. The University's academic organization includes Yale College, the Graduate School of Arts and Sciences, ten professional schools and a variety of research institutions and museums. The largest professional school is the Yale School of Medicine, which conducts medical services in support of its teaching and research missions.

The University has been granted tax exempt status under section 501(c)(3) of the Internal Revenue Code.

b. Basis of Presentation

The consolidated financial statements of the University include the accounts of all academic and administrative departments of the University, and affiliated organizations that are controlled by the University.

Financial statements of private, not-for-profit organizations measure aggregate net assets and net asset activity based on the absence or existence of donor-imposed restrictions. Net assets are reported as unrestricted, temporarily restricted and permanently restricted and serve as the foundation of the accompanying consolidated financial statements. Brief definitions of the three net asset classes are presented below:

Unrestricted Net Assets – Net assets derived from tuition and other institutional resources that are not subject to explicit donor-imposed restrictions. Unrestricted net assets also include gains on board designated funds functioning as endowment.

Temporarily Restricted Net Assets – Net assets subject to explicit donor-imposed restrictions on the expenditure of contributions or income and gains on contributed assets and net assets from endowments not yet appropriated for spending by the governing board. When temporary restrictions expire due to the passage of time or the incurrence of expenditures that fulfill the donor-imposed restrictions, temporarily restricted net assets are reclassified to unrestricted net assets. Temporarily restricted net assets are established with restricted contributions from donors and restricted income generated from endowments. In addition, temporarily restricted net assets include restricted contributions from donors classified as funds functioning as endowment. Restrictions include support of specific schools or departments of the University, for professorships, research, faculty support, scholarships and fellowships, library and art museums, building construction and other purposes.

Permanently Restricted Net Assets – Permanently restricted net assets include donor restricted endowments and student loan funds.

The University records as permanently restricted net assets the original amount of gifts which donors have given to be maintained in perpetuity ("donor restricted endowment funds"). For financial reporting purposes, all subsequent accumulated gains on such donor restricted endowment funds that are not so classified as permanently restricted net assets are recorded as temporarily restricted net assets until appropriated for expenditure by the Corporation through the application of the endowment spending policy. The Corporation understands its policies on retaining and spending from endowment to be consistent with the requirements of Connecticut law.

Measure of Operations – The University's measure of operations as presented in the consolidated statement of activities includes income from tuition (net of certain scholarships and fellowships) and fees, grants and contracts, medical services, contributions for operating programs, the allocation of endowment spending for operations and other revenues. Operating expenses are reported on the consolidated statement of activities by functional categories, after allocating costs for operation and maintenance of plant, interest on indebtedness and depreciation expense.

The University's non-operating activity within the consolidated statement of activities includes contributions, investment returns and other activities related to endowment and student loan net assets utilized for long-term investment purposes and contributions and other activities related to land, buildings and equipment that are not part of the University's measure of operations.

Capital Replacement Equilibrium – Recognizing the critical importance of maintaining its physical capital over many generations, the University allocates funds directly from the operating budget to a capital maintenance account. Significant effort has gone into estimating an annual equilibrium level funding target for internal purposes that would be reserved from annual operating funding sources to maintain Yale's facilities in good condition on a consistent basis, thus avoiding deferred maintenance and the need to borrow to meet the ongoing costs of maintaining its facilities. While not an exact science, an estimate of the full capital replacement equilibrium level for 2013 is \$196.8 million (unaudited). In 2013, the large majority of this amount was funded with operating funds and capital gifts, with the remainder of \$20 million funded through an internal bank. Total renovations for the year were \$212.5 million

c. Cash and Cash Equivalents

Cash and cash equivalents are recorded at cost which approximates fair value and include institutional money market funds and similar temporary investments with maturities of three months or less at the time of purchase. Cash and cash equivalents awaiting investment in the long term investment pool are reported as investments and totaled \$424.4 million and \$516.6 million at June 30, 2013 and 2012, respectively. Cash and cash equivalents do not include cash balances held as collateral.

Supplemental disclosures of cash flow information include the following, in thousands of dollars:

2012
65,179
11,300
51,300

d. Investments

Fair Value – The University's investments are recorded in the consolidated financial statements at fair value.

Fair value is a market-based measurement based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering assumptions, a three-tier fair value hierarchy has been established which prioritizes the inputs used in measuring fair value. The hierarchy of inputs used to measure fair value and the primary methodologies used by the University to measure fair value include:

- *Level 1* Quoted prices for identical assets and liabilities in active markets. Market price data is generally obtained from relevant exchange or dealer markets.
- *Level 2* Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable.
- *Level 3* Unobservable inputs in which there is little or no market data, requiring the University to develop its own assumptions.

Assets and liabilities measured at fair value are determined based on the following valuation techniques:

- Market approach Prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities; and
- *Income approach* Techniques to convert future amounts to a single present amount based on market expectations (including present value techniques and option-pricing models).

The fair value of publicly traded fixed income and equity securities is based upon quoted market prices and exchange rates, if applicable. The fair value of direct real estate investments is determined from periodic valuations prepared by independent appraisers.

Fair values for certain private equity, real asset (oil and gas, timber and real estate) and absolute return investments held through limited partnerships or commingled funds are based on the net asset value of such investments as determined by the respective external investment managers, including general partners, if market values are not readily ascertainable. These valuations necessarily involve assumptions and methods that are reviewed by the University's Investments Office.

Investments are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investments, it is at least reasonably possible that changes in the values of investments will occur in the near term and that such changes could materially affect the amounts reported in the University's financial statements.

Management Fees – The University records the cost of managing its endowment portfolio as a decrease in non-operating activity within the applicable net asset class in the consolidated statement of activities. Management fees consist of the internal costs of the Investments Office, outside custodian fees and fees for external investment managers and general partners.

Total Return – The University invests its endowment portfolio and allocates the related earnings for expenditure in accordance with the total return concept. A distribution of endowment return that is independent of the cash yield and appreciation of investments earned during the year is provided for program support. The University has adopted an endowment spending policy designed specifically to stabilize annual spending levels and to preserve the real value of the endowment portfolio over time. The spending policy attempts to achieve these two objectives by using a long-term targeted spending rate combined with a smoothing rule, which adjusts spending gradually to changes in the endowment market value. An administrative charge is assessed against the funds when distributed.

The University uses a long-term targeted spending rate of 5.25%. The spending amount is calculated using 80% of the previous year's spending and 20% of the targeted long-term spending rate applied to the market value two years prior. The actual rate of spending for 2013 and 2012, when measured against the previous year's June 30th endowment market value, was 5.3% and 5.1%, respectively.

The University determines the expected return on endowment investments with the objective of producing a return exceeding the sum of inflation and the target spending rate. Asset allocation is the key factor driving expected return. Yale's asset allocation policy combines tested theory and informed market judgment to balance investment risks with the need for high returns. Both the need to provide resources for current operations and the desire to preserve the purchasing power of assets leads the endowment to be weighted toward equity.

The University manages the majority of its endowment in the University Long Term Investment Pool ("the Pool"). The Pool is unitized and allows for efficient investment among a diverse group of funds with varying restricted purposes. In addition to University funds, the Pool includes assets of affiliated entities where the University has established investment management agreements.

e. Derivatives

Derivative financial instruments in the investment portfolio include interest rate swaps, equity swaps, credit default swaps, commodity swap contracts and currency forward contracts which are recorded at fair value with the resulting gain or loss recognized in the consolidated statement of activities.

f. Land, Buildings and Equipment

Land, buildings and equipment are generally stated at cost. Buildings leased under capital leases are recorded at the lower of the net present value of the minimum lease payments or the fair value of the leased asset at the inception of the lease. Annual depreciation is calculated on a straight-line basis over useful lives, or over the lease term for capital leases, ranging from 15 to 50 years for buildings and improvements and 4 to 15 years for furnishings and equipment.

g. Other Assets

Capitalized software and bond issuance costs are included in other assets in the consolidated statement of financial position. Capitalized software costs are amortized on a straight line basis over the estimated useful lives of the software, ranging from 5 to 10 years. Bond issue costs are amortized over the term of the related debt.

h. Collections

Collections at Yale include works of art, literary works, historical treasures and artifacts that are maintained in the University's museums and libraries. These collections are protected and preserved for public exhibition, education, research and the furtherance of public service. Collections are not capitalized; purchases of collection items are recorded as operating expenses in the University's consolidated financial statements in the period in which the items are acquired.

i. Split-Interest Agreements

The University's split-interest agreements with donors consist primarily of charitable gift annuities, pooled income funds and irrevocable charitable remainder trusts for which the University serves as trustee. Assets are invested and payments are made to donors and/or other beneficiaries in accordance with the respective agreements.

Contribution revenues for charitable gift annuities and charitable remainder trusts are recognized at the date the agreements are established. In addition, the fair value of the estimated future payments to be made to the beneficiaries under these agreements is recorded as a liability. For pooled income funds, contribution revenue is recognized upon establishment of the agreement at the fair value of the estimated future receipts, discounted for the estimated time period until culmination of the agreement.

j. Beneficial Interest in Trust Assets

The University is the beneficiary of certain perpetual trusts and charitable remainder trusts held and administered by others. The estimated fair values of trust assets are recognized as assets and as gift revenue when reported to the University.

k. Net Tuition, Room and Board

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Tuition, room and board revenue is generated from an enrolled student population of approximately 11,823. The undergraduate population of approximately 5,399 is a diverse group attracted from across the United States and from many foreign countries. Foreign students account for approximately 10.0% of the undergraduate population. Net tuition revenue from undergraduate enrollment represents approximately 52.5% of total net tuition revenue in 2013. The University maintains a policy of offering qualified applicants admission to Yale College without regard to financial circumstance as well as meeting in full the demonstrated financial need of those admitted. Student need in all programs throughout the University is generally fulfilled through a combination of scholarships and fellowships, loans and employment during the academic year. Tuition, room and board revenue has been reduced by certain scholarships and fellowships in the amounts of \$247.8 million and \$247.1 million in 2013 and 2012, respectively.

l. Contributions

Unconditional promises to give that are expected to be collected within one year are recorded at their net realizable value. Amounts expected to be collected in future years are recorded at the present value of estimated future cash flows, which includes estimates for potential uncollectible receivables. The discount on those contributions is computed using an interest rate that reflects fair value applicable to the year in which the promise is received. Amortization of the discount is included in contribution revenue. Conditional promises to give are not recorded as support until such time as the conditions are substantially met. A facilities and administrative charge is assessed against current use gifts when received.

m. Grant and Contract Income

The University receives grant and contract income from governmental and private sources. In 2013 and 2012, grant and contract income received from the Federal government totaled \$535.8 million and \$562.6 million, respectively. The University recognizes revenue associated with the direct costs of sponsored programs as the related costs are incurred. Recovery of facilities and administrative costs of Federally sponsored programs is at rates negotiated with the University's cognizant agency, the Department of Health and Human Services. The University and the Federal government are currently operating under an agreement that establishes facilities and administrative cost reimbursement rates under Federal grants and contracts through June 30, 2014.

n. Medical Services Income

The University has agreements with third-party payers, including health maintenance organizations, that provide payment for medical services at amounts different from standard rates established by the University. Medical services income is reported net of contractual allowances from third-party payers and others for services rendered, and further adjusted for estimates of uncollectible amounts.

o. Net Assets Released from Restrictions

Reclassification of net assets is based upon the satisfaction of the purpose for which the net assets were restricted or the completion of a time stipulation. Restricted operating activity including contributions and net investment return earned, which are restricted, are reported as temporarily restricted support and reclassified to unrestricted when any donor-imposed restrictions are satisfied. Non-operating restricted net assets associated with building costs are reclassified to unrestricted net assets when the capital asset is placed in service.
p. Self Insurance

The University self-insures at varying levels for unemployment, disability, workers' compensation, property losses, certain healthcare plans, general and professional liability; and obtains coverage through a captive insurance company for medical malpractice and related general liability losses. Insurance is purchased to cover liabilities above self-insurance limits. Estimates of retained exposures are accrued.

q. Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosures of contingencies at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period.

Significant estimates made by management include the valuation of alternative investments, the estimated net realizable value of receivables, estimated asset retirement obligations, liabilities under split-interest agreements, and the actuarially determined employee benefit and self-insurance liabilities. Actual results could differ from those estimates.

r. Implementation of Accounting Standards

Effective July 1, 2012, the University adopted new reporting standards requiring quantitative disclosures about unobservable inputs used for recurring Level 3 fair value measurements and other qualitative disclosures about Level 3 fair value measurements. The implementation of these standards had no material impact on financial statement amounts reported.

In fiscal 2014, new reporting requirements addressing classification of donated securities in the statement of cash flows will be implemented. The impact to the 2013 financial statements in not expected to be significant.

s. Summarized 2012 Financial Information

The accompanying 2013 financial statements include selected comparative summarized financial information for 2012. Such information does not include sufficient detail to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the University's 2012 financial statements, from which the summarized financial information was derived. In addition, certain amounts have been reclassified to conform to the current-year presentation.

2. Investments

The University Endowment maintains a diversified investment portfolio with a strong orientation to equity investments and strategies designed to take advantage of market inefficiencies. The University's investment objectives are guided by its asset allocation policy and are achieved in partnership with external investment managers operating through a variety of investment vehicles, including separate accounts, limited partnerships and commingled funds. The University's heavy allocation to non-traditional asset classes, such as absolute return (hedge strategies), private equity (venture capital and leveraged buy-outs), real estate, and natural resources (timber, energy and minerals), generates return potential and diversification in the portfolio.

The components of endowment and non-endowment investments, net of related liabilities at June 30 are presented below in thousands of dollars:

	2013	2012
Endowment investments:		
Long term investment pool	\$20,283,145	\$18,856,239
Other	425,648	408,050
Total net endowment investments	20,708,793	19,264,289
Non-endowment investments: Long term investment pool	315,361	242,843
Bonds	452,109	347,932
Derivatives	(191,479)	(438,459)
Other	353,328	325,698
Total non-endowment investments	929,319	478,014
Net investments, at fair value	\$ 21,638,112	\$19,742,303

As described in Note 1d, investments are recorded at fair value. The following table summarizes the fair values of the University's investments by major type and related liabilities as of June 30, in thousands of dollars:

	Level 1	Level 2	Level 3	2013	2012
Investments, at fair value:					
Cash and cash equivalents	\$1,012,510	\$ -	\$ -	\$ 1,012,510	\$ 1,432,980
Fixed income:					
US government securities	1,596,280	46,863	34	1,643,177	1,739,712
Foreign government securities	-	89,739	-	89,739	124,681
Corporate and other securities	69,595	1,340,964	216,556	1,627,115	1,475,006
Total fixed income	1,665,875	1,477,566	216,590	3,360,031	3,339,399
Common stock:					
Domestic	1,260,712	4,545	64,627	1,329,884	1,216,824
Foreign	1,058,887	62,951	96,533	1,218,371	1,173,532
Total common stock	2,319,599	67,496	161,160	2,548,255	2,390,356
Equity investments:					
Absolute return	-	-	2,411,824	2,411,824	1,956,068
Domestic	-	-	972,871	972,871	1,109,319
Foreign	-	-	1,057,912	1,057,912	772,429
Private	-	-	6,866,097	6,866,097	6,906,243
Real estate	-	-	4,326,728	4,326,728	4,012,800
Natural resources	-	-	1,741,227	1,741,227	2,124,855
Total equity investments	-	-	17,376,659	17,376,659	16,881,714
Other investments	243,395	898,608	301,517	1,443,520	1,594,161
Total investments, at fair value	5,241,379	2,443,670	18,055,926	25,740,975	25,638,610
Liabilities associated with investments:					
Securities sold, not yet purchased	902,162	110,921	25,350	1,038,433	1,691,476
Reverse repurchase agreements	-	824,655	56,250	880,905	987,233
Other liabilities	433,008	640,955	677,012	1,750,975	2,359,555
Total liabilities associated with investments	1,335,170	1,576,531	758,612	3,670,313	5,038,264
	\$3,906,209	\$ 867,139	\$17,297,314	22,070,662	20,600,346
Less: Medium-term notes Series B (See Note 9)			249,857	749,287
Non-controlling interests				182,693	108,756
Net investments, at fair value				\$ 21,638,112	\$ 19,742,303

Medium-term notes Series B are general liabilities of the University not tied to investment activity but incurred during 2009 to support endowment spending for operations under the spending policy.

Assets and liabilities of investment companies that are controlled by the University are consolidated for reporting purposes. Certain consolidated subsidiaries are controlled but not wholly owned by the University. The portion of a consolidated entity that is not owned by the University is reported as a non-controlling interest.

Other liabilities in 2012 include a \$400 million note which was paid during 2013.

The fair value of consolidated investment company assets and liabilities included in the University financial statements, in thousands of dollars, include:

	2013	2012
Consolidated Investment		
Company Assets	\$ 3,832,715	\$3,796,298
Consolidated Investment		
Company Liabilities	2,096,989	2,483,436
	\$ 1,735,726	\$ 1,312,862

Level 3 investments are valued by external managers using valuation techniques standard in the industry in which they operate. The Yale Investments Office reviews these valuation methods and evaluates the appropriateness of these valuations each year. In certain circumstances, when the general partner does not provide a valuation or the valuation provided is not considered appropriate the Investments Office will determine those values. The following table summarizes quantitative inputs and assumptions used for Level 3 investments at June 30, 2013 for which fair value is based on unobservable inputs that are not developed by the external managers. Significant increases or decreases in these unobservable inputs may result in significantly higher or lower valuation results.

			Significant		
	Fair Value	Valuation	Unobservable		
Asset Class	(in 000's)	Technique	Input	Range	Weighted Average
Fixed Income	\$75,137	Discounted cash flow	Counter party default risk	12%	NA
Real Estate	\$14,900	Discounted cash flow	Weighted average cost of capital	11%-30%	18%
		Comparable public sales	Price per acre Price per lot	\$5,060-\$16,901 \$16,667-\$59,328	\$8,760 \$25,156
Natural Resources	\$44,200	Market comparable properties	Discount for uneconomic production at current prices	0%-75%	25%
	\$19,500	Market comparable sales	Discount for litigation risk	0%-50%	25%
	\$407,707	Discounted cash flow	Weighted average cost of capital	8%-10%	8%

The valuation process for investments categorized in Level 3 of the fair value hierarchy includes evaluating the operations and valuation procedures of the managers of the Investment Companies and the transparency of those processes through background and reference checks, attendance at investor meetings and periodic site visits. In determining the fair value of investments, Investments Office staff reviews periodic investor reports, interim and annual audited financial statements received from the Investment Companies, reviews material quarter over quarter changes in valuation and assesses the impact of macro market factors on the performance. The Investments Office meets with the Investment Committee quarterly to review investment transactions and monitor performance of the managers of these Investment Companies. The table below presents the change in fair value measurements for the University's Level 3 investments during the year ended June 30, in thousands of dollars:

	2013	2012
Beginning balance	\$17,024,026	\$ 17,115,715
Realized and unrealized gain, net	1,798,891	729,194
Purchases	2,082,007	2,042,866
Sales	(3,597,411)	(2,777,783)
Transfers in	51,313	79,358
Transfers out	(61,512)	(165,324)
Ending balance	\$ 17,297,314	\$17,024,026

Realized gains and losses are reported in total endowment return, net of fees. Included in net realized and unrealized gain in Level 3 reported above were unrealized gains (losses) that relate to assets held at June 30, 2013 and 2012 of \$724.0 million and (\$180.1) million, respectively. Agreements with investment companies include certain redemption terms and restrictions as noted in the following table:

			Unfunded		
	Fair Value		Commitments		
Asset Class	(in 000's)	Remaining Life	(in 000's)	Redemption Terms	Redemption Restrictions
Absolute Return	\$ 2,411,824	No Limit	\$ 8,142	Redemption terms range from monthly with 30 days notice to annually with 90 days notice.	Lock-up provisions range from none to 5 years.
Domestic Equity	972,871	No Limit	61,879	Redemption terms range from monthly with 3 days notice to annually with 90 days notice.	Lock-up provisions range from none to 7 years.
Foreign Equity	1,057,912	No Limit	92,495	Redemption terms range from monthly with 15 days notice to closed end structures not available for redemption.	Lock-up provisions range from none to 7 years.
Private Equity	6,866,097	1–10 years	2,479,408	Closed end funds not eligible for redemption.	Not redeemable.
Real Estate	4,326,728	1–10 years	1,372,252	Closed end funds not eligible for redemption.	Not redeemable.
Natural Resources	1,741,227	1-35 years	271,815	Closed end funds not eligible for redemption.	Not redeemable.
Total	\$17,376,659		\$4,285,991		

The University has various sources of internal liquidity at its disposal, including cash, cash equivalents and marketable debt and equity securities. If called upon at June 30, 2013, management estimates that it could have liquidated approximately \$4.0 billion of investments within 90 days (unaudited) to meet short-term needs.

The University is required to provide collateral for securities sold, not yet purchased and reverse repurchase agreements. Fixed income securities of \$1.1 billion were provided at June 30, 2013 to collateralize these positions initiated by the University and by its consolidated investment companies. University policy with respect to repurchase agreements, including those initiated by consolidated investment companies, is to take possession of the underlying assets. Fixed income securities were obtained in the amount of \$1.0 billion at June 30, 2013 as collateral for these positions. The market values of the underlying assets are reviewed daily to ensure that the amounts are adequately collateralized and, when warranted, additional collateral is obtained or provided. Nearly all underlying assets and collateral are permitted to be sold or repledged.

Endowment investments include beneficial interests in outside trusts of \$136.5 million and \$127.5 million at June 30, 2013 and 2012, respectively. Non-endowment investments at June 30, 2012 included CHEFA proceeds available for approved construction and campus renovation projects of \$24.6 million. The following investments held under split-interest agreements are included in the endowment investment portfolio, in thousands of dollars:

	2013	2012
Charitable gift annuities	\$ 134,601	\$ 118,601
Charitable remainder trusts	98,785	94,346
Pooled income funds	13,388	14,930
	\$ 246,774	\$ 227,877

Split interest liabilities reported in the consolidated statement of financial position total \$101.7 million and are recorded at fair value using Level 2 measurements.

The University may employ derivatives and other strategies to (1) manage against market risks, (2) arbitrage mispricings of related securities and (3) replicate long or short positions more cost effectively. The University does not invest in derivatives for speculation. The fair value of derivative positions held at June 30, 2013 and related gain (loss) for the year, in thousands of dollars, were as follows:

	Assets	Liabilities	Gain (Loss)
Endowment:			
Credit default swaps	\$226,999	\$ (98,541)	\$(66,603)
Interest rate swaps	28,212	(116,739)	11,590
Other	78,731	(49,386)	(12,537)
	333,942	(264,666)	(67,550)
Other:			
Interest rate swaps	-	(182,900)	234,094
Energy swaps	-	(8,579)	42
	-	(191,479)	234,519
	\$ 333,942	\$(456,145)	\$ 166,969

Credit default swaps

Credit default swaps are used to simulate long or short positions that are unavailable in the market or to reduce credit risk where exposure exists. The buyer of a credit default swap is obligated to pay to the seller a periodic stream of payments over the term of the contract in return for a contingent payment upon occurrence of a contracted credit event. As of June 30, 2013, the total notional amount of credit default swap contracts for buy protection amounts to \$2.9 billion and the notional amount related to sell protection is \$1.4 billion.

Interest rate swaps

Interest rate swaps are used to manage exposure to interest rate fluctuations.

The notional amount of contracts that pay based on fixed rates and receive based on variable rates at June 30, 2013 were \$2.0 billion. The notional amount of contracts that pay based on variable rates and receive based on fixed rates were \$397.2 million at June 30, 2013.

Energy swaps

Energy swaps are used in connection with settling planned purchases of energy consumption and adjusting market exposures.

Derivative assets are reported as investments in the consolidated statement of financial position and derivative liabilities are reported as liabilities associated with investments. Gains and losses on derivatives used for investing are reported as part of total endowment return and gains and losses related to University debt management and energy consumption are reported as other investment loss in the consolidated statement of activities as non-operating activity.

Derivatives held by limited partnerships and commingled investment trusts in which Yale invests pose no off-balance sheet risk to the University due to the limited liability structure of the investments.

Certain investment transactions, including derivative financial instruments, necessarily involve counterparty credit exposure. Such exposure is monitored regularly by the University's Investments Office in accordance with established credit policies and other relevant criteria. Collateral provided by Yale and its consolidated investment companies related to derivative transactions amounted to \$389.6 million at June 30, 2013. A summary of the University's total investment return as reported in the consolidated statement of activities is presented below, in thousands of dollars:

	2013	2012
Investment income	\$ 401,567	\$ 376,628
Realized and unrealized gain,		
net of investment management fees	1,893,258	501,255
Total endowment return	2,294,825	877,883
Other investment income	64,031	49,691
	\$2,358,856	\$ 927,574

Endowment investment returns totaling \$1,018.7 million and \$991.0 million were allocated to operating activities in 2013 and 2012, respectively, using the spending policy described in Note 1d.

3. Accounts Receivable

Accounts receivable from the following sources were outstanding at June 30, in thousands of dollars:

		2013	2012
Medical services, net	\$	72,176	\$ 51,086
Grants and contracts		57,776	50,503
Affiliated organizations		44,680	43,513
Publications		6,921	9,165
Other		13,787	13,217
		195,340	167,484
Less: Allowance for doubtful accounts	(12,964)	(15,363)
	\$	182,376	\$ 152,121

Medical services receivables are net of an allowance for contractual adjustments of \$103.9 million and \$69.0 million at June 30, 2013 and 2012, respectively. Collections for patient care services are primarily based on negotiated contracts from managed care companies (64%), Medicare (15%), and Medicaid (10%). In addition, payments are received directly from patients (6%) and commercial insurance and others (5%).

The University assesses credit losses on all accounts receivable on a regular basis to determine the allowance for doubtful accounts.

The University and Yale-New Haven Hospital (the "Hospital") are parties to an affiliation agreement that establishes guidelines for the operation of activities between these two separate organizations. These guidelines set forth each organization's responsibility under the common goal of delivering comprehensive patient care services. The University provides professional services from faculty of the Yale School of Medicine and a variety of other administrative and clinical services. The net receivable from the Hospital amounted to \$34.8 million and \$28.9 million at June 30, 2013 and 2012, respectively. Balances are settled in the ordinary course of business. The University recognized \$180.8 million in revenue and incurred \$57.4 million in expenses related to activities with the Hospital during the period ended June 30, 2013. In addition, the Hospital has invested \$330.0 million in the University Long Term Investment Pool with a fair value at June 30, 2013 of \$444.4 million. This balance is recorded as a liability associated with investments.

4. Contributions Receivable

Contributions receivable consist of the following unconditional promises to give as of June 30, in thousands of dollars:

2013	2012
\$ 259,962	\$ 275,052
59,068	82,950
165,095	185,570
484,125	543,572
(12,602)	(20,161)
(52,067)	(56,384)
\$ 419,456	\$ 467,027
\$ 228,271	\$ 262,786
242,097	264,893
13,757	15,893
\$ 484,125	\$ 543,572
\$ \$ \$	2013 \$ 259,962 59,068 165,095 484,125 (12,602) (52,067) \$ 419,456 \$ 228,271 242,097 13,757 \$ 484,125

Discount rates used to calculate the present value of contributions receivable ranged from 0.33% to 5.49% at June 30, 2013, and from 0.33% to 5.16% at June 30, 2012.

At June 30, 2013, the University had conditional pledges that depend on the occurence of a future and uncertain event of approximately \$251.0 million. Conditional pledges are recognized when the condition is met.

5. Notes Receivable

Notes receivable at June 30, in thousands of dollars, include:

	2013	2012
Institutional student loans	\$ 48,257	\$ 44,700
Federally-sponsored student loans	35,025	33,609
Notes receivable	54,429	54,774
	137,711	133,083
Less: Allowance for doubtful accounts	(9,227)	(8,451)
	\$ 128,484	\$ 124,632

Student Loans

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Institutional student loans include donor funds restricted for student loan purposes and University funds made available to meet demonstrated need in excess of all other sources of student loan borrowings. Interest accrues at fixed rates upon loan disbursement. Federally-sponsored student loans have mandated interest rates and repayment terms subject to restrictions as to their transfer and disposition.

Management regularly assesses the adequacy of the allowance for credit losses for student loans by performing ongoing evaluations of the student loan portfolio, including such factors as the differing economic risks associated with each loan category, the financial condition of specific borrowers, the level of delinquent loans, the value of any collateral and, where applicable, the existence of any guarantees or indemnifications. Federally-sponsored loans represent amounts due from current and former students under certain Federal Loan Programs. Loans disbursed under these programs are able to be assigned to the Federal government in certain non-repayment situations. In these situations the Federal portion of the loan balance is guaranteed.

Amounts received from the Federal government to fund a portion of the Federally-sponsored student loans are ultimately refundable to the Federal government and have been reported as advances from Federal government for student loans in the consolidated statement of financial position. The recorded value of student loan instruments approximates fair value.

Notes Receivable

The University and Yale New Haven Hospital (the "Hospital") entered into an agreement during 2012 under which the Hospital will pay the University \$2.7 million a year over a 40 year term to reimburse the University for advances made in connection with the construction of Hospital facilities. The payment includes interest based on the 5 year Treasury bill plus 175 basis points.

6. Other Assets

Other assets at June 30, in thousands of dollars, include:

	2013	2012
Software costs, net of		
accumulated amortization	\$ 76,437	\$ 73,981
Deferred expenses	31,954	28,374
Insurance receivable	19,719	20,778
Inventories	17,482	17,280
Bond issue costs, net of		
accumulated amortization	11,969	11,832
	\$ 157,561	\$152,245

Amortization expense included in operating expenses amounted to \$21.2 million and \$20.3 million in 2013 and 2012, respectively.

7. Land, Buildings and Equipment

Land, buildings and equipment at June 30, less accumulated depreciation, in thousands of dollars, are as follows:

		2013		2012
Land and real estate improvements	\$	128,883	\$	113,648
Buildings		5,252,132		5,163,854
Buildings under capital leases		61,665		61,665
Equipment		632,231		627,584
		6,074,911		5,966,751
Less: Accumulated depreciation				
and amortization	(2,150,913)	(2	2,006,372)
		3,923,998		3,960,379
Construction in progress		423,259		294,349
	\$	4,347,257	\$	4,254,728

Depreciation expense included in operating expenses amounted to \$221.2 million and \$210.5 million in 2013 and 2012, respectively. Amortization expense on capital lease assets amounted to \$2.2 million in both 2013 and 2012.

8. Other Liabilities

Other liabilities consist of obligations of the University that will be paid over extended periods and consist of the following, in thousands of dollars:

	2013	2012
Employee benefit obligations	\$ 775,893	\$ 979,161
Compensated absences	66,929	65,706
Asset retirement obligations	36,800	38,000
Financial aid grant obligations	44,650	43,213
Other	28,269	31,362
	\$ 952,541	\$ 1,157,442

Included in employee benefit obligations are defined benefit plan liabilities in excess of plan assets. These liabilities amounted to \$704.2 million at June 30, 2013 and \$922.8 million at June 30, 2012. (See Note 11)

9. Debt Obligations

Bonds, notes and capital lease obligations outstanding at June 30, in thousands of dollars, include:

	Effective	Year of		
	Interest Rate	Maturity	Outsta	nding Balance
	2013	2013	2013	2012
Connecticut Health and				
Educational Facilities Authority				
(CHEFA) tax-exempt bonds:				
Series S	0.15%	2027	\$ 135,865	\$ 135,865
Series T	2.41%	2029	250,000	250,000
Series U	0.12%	2033	250,000	250,000
Series V	0.10%	2036	200,000	200,000
Series X	3.20%	2037/2042	350,000	350,000
Series Y	3.15%	2035	308,188	308,558
Series Z	4.85%	2042	611,935	612,346
Series 2010A	2.70%	2025/2040/2049	551,140	558,600
Total CHEFA bonds			2,657,128	2,665,369
Medium-term notes	7.38%	2096	124,614	124,596
Medium-term notes Series B	2.90%	2014	499,723	999,049
Commercial paper	0.16%	2013	181,410	181,430
Capital leases–buildings	5.75%	2032/2048	56,548	57,523
Other notes payable	7.85%	2020	2,669	2,930
U.S. Department of Energy	2.72%	2029	72,328	77,104
			\$ 3,594,420	\$4,108,001

CHEFA Series 2010A bonds consist of 1) \$80 million Series 2010A-1 bonds maturing July 2025 at a fixed interest rate of 5%; 2) \$150 million Series 2010A-2 bonds maturing July 2040 at a fixed interest rate of 5%; 3) \$150 million Series 2010A-3 bonds maturing July 2049, the initial fixed interest rates were 2% for \$14.7 million and 4% for \$135.3 million; and 4) \$150 million Series 2010A-4 bonds maturing July 2049, the initial fixed interest rates are 2.5% for \$20.2 million and 5% for \$129.8 million applied until February 2015. These bonds include a net premium of \$21.2 million as of June 30, 2013. The premium associated with the issuance is being amortized over the interest rate period. Series 2010A-1 and 2010A-2 bonds are subject to an optional redemption by the University in July 2018. In February 2013 Series 2010A-3 was reissued at a fixed rate of 0.875% to be applied through February 2018.

CHEFA Series Z bonds consist of 1) \$400 million Series Z-1 bonds at a fixed interest rate of 5%; 2) \$100 million Series Z-2 bonds at a fixed interest rate of 5.05%; and 3) \$100 million Series Z-3 bonds at a fixed interest rate of 5.05%. Z-1 bonds include a net premium of \$11.9 million as of June 30, 2013. The original premium associated with this issuance is being amortized over the life of the bonds. Series Z-1, Z-2 and Z-3 bonds mature on July 1, 2042. Series Z-1 bonds are subject to an optional redemption in July 2016. Series Z-2 and Z-3 bonds are subject to an optional redemption in July 2017.

CHEFA Series Y bonds consist of 1) \$200 million Series Y-1 bonds at a fixed interest rate of 5%; 2) \$50 million Series Y-2 variable rate bonds, currently bearing interest at a daily rate; and 3) \$50 million Series Y-3 variable rate bonds, currently bearing interest at a daily rate. Series Y-1, Y-2 and Y-3 bonds mature on July 1, 2035. Series Y-1 bonds are subject to an optional redemption in July 2015. Y-1 bonds include a net premium of \$8.2 million as of June 30, 2013. The original premium associated with this issuance is being amortized over the life of the bonds. Series Y-2 and Y-3 bonds may be converted to other variable rate modes or to a fixed rate at the discretion of the University.

CHEFA Series X bonds consist of 1) \$100 million Series X-1 bonds at a fixed interest rate of 5%, which were set to mature on July 1, 2042; 2) \$125 million Series X-2 variable rate bonds, currently bearing interest at a weekly rate; and 3) \$125 million Series X-3 variable rate bonds, bearing interest at a daily rate, which were converted to a fixed interest rate of 4.85% on May 1, 2008. Series X-2 and X-3 bonds mature on July 1, 2037. Series X-2 bonds may be converted to other variable rate modes or to a fixed rate at the discretion of the University. Series X-3 bonds are subject to an optional redemption in July 2017. The \$100 million Series X-1 bonds were redeemed on July 1, 2013 by the issuance of CHEFA Series 2013A with an initial interest rate of 1.35% set to mature on July 1, 2042.

CHEFA Series V bonds bear interest at a daily rate and mature on July 1, 2036. The bonds may be converted from a daily rate period to other variable rate modes or to a fixed rate mode at the discretion of the University.

CHEFA Series U bonds bear interest at a weekly rate. The bonds may be converted from the weekly rate period to other variable rate modes or to a fixed rate mode at the discretion of the University.

CHEFA Series T bonds consist of 1) \$125 million Series T-1 bonds at a fixed rate of 4.7%; and 2) \$125 million Series T-2 bonds currently bearing interest at a weekly rate. Series T-1 bonds are subject to an optional redemption on July 2017.

CHEFA Series S bonds bear interest at a money market municipal rate and are outstanding for varying interest rate periods of 270 days or less. The bonds may be converted from the money market mode to other variable rate modes or to a fixed rate mode at the discretion of the University.

Medium-term notes in the amount of \$124.6 million are recorded net of a discount of \$386 thousand at June 30, 2013. The notes mature in the year 2096, with an optional redemption provision in the year 2026. The notes bear interest at a fixed rate of 7.38%.

Medium-term notes Series B in the amount of \$499.7 million are recorded net of discount of \$277 thousand at June 30, 2013. The notes mature in 2014 and bear interest at a fixed rate of 2.9%. Medium-term notes Series B bonds in the amount of \$500 million were redeemed in fiscal year 2013.

Commercial paper consists of notes issued in the short-term taxable market, and is sold at a discount from par. The maturities of individual notes are issued in ranges from one day to no more than one year, and fall on average in a range of thirty to sixty days.

Certain lease agreements entered into by the University qualify as capital leases with obligations of \$56.5 million and \$57.5 million at June 30, 2013 and 2012, respectively. The agreements call for the University to lease the buildings through 2032 and 2048.

The University partially financed a wind energy project, Record Hill Wind, LLC, through a financing arrangement with the Department of Energy. The financing arrangement is non-recourse debt to the University and bears interest at rates ranging from 2.236% to 2.776%.

Total interest expense incurred on indebtedness was \$160.3 million and \$159.5 million in 2013 and 2012 respectively. Interest capitalized to land, buildings and equipment totaled \$3.6 million and \$5.8 million in 2013 and 2012, respectively.

Scheduled maturities of the facilities debt obligations, in thousands of dollars, are as follows:

\$	186,601
	505,295
	5,444
	5,602
	5,770
	546,305
:	2,298,813
	\$

The Series Y-2 and Y-3, X-2, V, U, S, and one-half of the T bonds are subject to tender by bondholders. To the extent all bonds subject to tender could not be remarketed, \$935.9 million of bonds scheduled for maturity between 2015 and 2035 would be due when tendered.

The University has revolving credit agreements available totaling \$1.1 billion to provide alternative liquidity to support the University's variable rate demand notes.

The fair value of the University's fixed rate debt, \$2.4 billion at June 30, 2013, is estimated based on quoted market prices for the same or similar issues. The carrying value of the fixed rate debt is \$54.4 million less than its fair value. The carrying value of commercial paper and variable rate bonds approximates fair value because of the variable nature of the interest rates and the shortterm maturity of these instruments.

Fair value for debt is determined using Level 2 fair value measurements.

10. Pension Plans — Defined Contribution

The University maintains certain defined contribution plans for faculty and certain staff employees. Participants may direct employee and employer contributions to the Teachers' Insurance and Annuity Association (TIAA) and College Retirement Equities Fund (CREF), as well as other investment options. Pension expense for this plan was \$88.8 million and \$84.5 million in 2013 and 2012, respectively.

11. Pension and Postretirement Plans — Defined Benefit

The University has a noncontributory, defined benefit pension plan for staff employees as well as a defined benefit faculty retirement incentive plan. The staff pension plan provides payments based on years of participation and the employee's highest annual rate of earnings during the last five years of employment. The faculty plan provides a lump sum payment, based on service and the last three years' salary, for tenured faculty who retire at certain ages.

In addition, the University provides postretirement benefits including health benefits based on years of service, life insurance and a pay-out of unused sick time. While the University's subsidy of the cost of comprehensive health care benefits differs among retiree groups, substantially all employees who meet minimum age and service requirements and retire from the University are eligible for these benefits. Non faculty employees are paid 50% of unused sick time and receive life insurance benefits upon retirement from active status.

The University uses a June 30th measurement date for its defined benefit plans.

The following table sets forth the pension and postretirement plans' funded status that is reported in the consolidated statement of financial position at June 30, in thousands of dollars:

	Pension		Pos	ostretirement	
	2013	2012	2013	2012	
Change in benefit obligation:					
Benefit obligation, beginning of year	\$ 1,182,679	\$ 1,043,345	\$ 898,679	\$ 822,746	
Service cost, excluding assumed					
administration expenses	48,180	40,826	39,006	36,807	
Interest cost	52,704	51,324	38,751	40,012	
Benefit payments	(34,290)	(32,530)	(22,220)	(24,773)	
Assumption changes	(104,681)	75,518	(79,051)	34,325	
Amendments	-	6,258	-	12	
Actuarial loss (gain)	3,439	(2,062)	(23,714)	(10,450)	
Benefit obligation, end of year	\$ 1,148,031	\$ 1,182,679	\$ 851,451	\$ 898,679	
Change in plan assets:					
Fair value, beginning of year	\$ 810,984	\$ 822,242	\$ 347,532	\$ 340,925	
Actual return on plan assets	107,655	9,707	48,844	8,000	
University contributions	20,620	13,190	18,880	24,402	
Benefits and expenses paid	(36,095)	(34,155)	(23,133)	(25,795)	
Fair value, end of year	\$ 903,164	\$ 810,984	\$ 392,123	\$ 347,532	
Funded Status	\$ (244,867)	\$ (371,695)	\$ (459,328)	\$ (551,147)	

Funded Status

The University has recognized the difference between accrued benefit costs of its defined benefit plans and the funded status for the year ended June 30, 2013, as an adjustment to non-operating unrestricted net assets presented as change in funding status of defined benefit plans in the consolidated statement of activities. The components of this adjustment for the year ended June 30, 2013, in thousands of dollars, include:

	Pension	nsion Postretirement		Pension Postretirement	
Unrecognized					
net actuarial gain	\$(149,017)	\$(125,611)	\$(274,628)		
Amortization	(13,748)	(18,474)	(32,222)		
	\$(162,765)	\$(144,085)	\$(306,850)		

The cumulative amounts of these adjustments reported as deductions to net assets in the consolidated statement of financial position at June 30, 2013, in thousands of dollars, include:

	Pension	Postretirement	Total
Unrecognized			
net actuarial loss	\$ 58,971	\$ 205,072	\$ 264,043
Unrecognized			
prior service cost	41,842	4,030	45,872
	\$ 100,813	\$ 209,102	\$ 309,915

Amounts recorded as an adjustment at June 30, 2013 that are expected to be amortized into operating activity during fiscal year 2014, in thousands of dollars, include:

	Pension	Postretirement	Total
Net actuarial loss	\$ 405	\$ 8,767	\$ 9,172
Prior service cost	9,971	1,434	11,405
	\$10,376	\$10,201	\$20,577

Actuarial gains or losses and prior service costs resulting from plan amendments are amortized over the average remaining years of service of active participants. The transition obligation for the retiree health plan has been fully amortized.

Benefit Obligation

The benefit obligation represents the actuarial present value of future payments to plan participants for services rendered prior to that date, based on the pension benefit formula. In calculating the value, the participants' compensation levels are projected to retirement.

The accumulated benefit obligation for the pension plans was \$919.5 million at June 30, 2013, and \$922.0 million at June 30, 2012. The accumulated benefit obligation differs from the benefit obligation above in that it does not consider assumptions about future compensation levels. It represents the actuarial present value of future payments to plan participants using current and past compensation levels.

Changes in assumptions during the year resulted in a decrease to the pension benefit obligation and a decrease to the postretirement benefit obligation at June 30, 2013, as follows, in thousands of dollars:

	Pension	Postretirement		Total
Discount rate	\$ (96,060)	\$ (76,238)	\$	(172,298)
Demographic	-	(2,813)		(2,813)
Salary scale	(8,621)	-		(8,621)
	\$(104,681)	\$ (79,051)	\$	(183,732)

The discount rate was changed from 4.50% in 2012 to 5.00% in 2013 for all plans. Adjustments were made to the salary increase assumptions for managerial and professional staff participants based on an actuarial review of salaries. Additionally, in 2013, the retirement, withdrawal and salary scale assumptions were updated for the life insurance and sick pay plans to be consistent with the assumptions used for the postretirement medical plan.

Assumptions used in determining the year end obligation of the pension and postretirement plans are:

	2013	2012
Weighted-average discount rate	5.00%	4.50%
Increase in future compensation levels	s 4.52%	4.52%
Projected health care cost trend rate		
(pre-65/post-65)	7.50%/7.00%	7.75%/7.25%
Ultimate trend rate (pre-65/post-65)	5.00%/5.00%	5.00%/5.00%
Year ultimate trend rate is achieved	2020	2020
Mortality	RP2000CH,	RP2000CH,
	generational	generational
	projection	projection

The health care cost trend rate assumption has a significant effect on the amounts reported. For the fiscal year ended June 30, 2013, a one percent change in the health care cost trend rate would cause the postretirement benefit obligation at June 30, 2013, to change by approximately 14.5% and would also cause the sum of the service cost and interest cost components of postretirement expense to change by approximately 18.0%.

Net Periodic Benefit Cost

Net periodic benefit cost for the plans includes the following components, in thousands of dollars:

	Pension		Posti	retirement
	2013	2012	2013	2012
Service cost	\$ 50,001	\$ 42,646	\$ 40,106	\$ 37,906
Interest cost	52,704	51,323	38,751	40,012
Expected return				
on plan assets	(59,895)	(72,341)	(26,185)	(31,132)
Net amortization:				
Transition obligation	-	-	3,717	3,717
Prior service cost	10,047	9,697	1,434	1,434
Net loss	3,701	616	13,323	13,468
Net periodic				
benefit cost	\$ 56,558	\$ 31,941	\$ 71,146	\$ 65,405

Assumptions used in determining the net periodic benefit cost of the pension and postretirement plans are:

	2013	2012
Weighted-average discount rate	4.50%	5.00%
Expected long-term rate of return	7.00%	8.50%
Compensation increase	4.52%	4.49%
Health care cost increase		
(pre-65/post-65)	7.75%/7.25%	8.00%/7.50%
Ultimate trend rate		
(pre-65/post-65)	5.00%/5.00%	5.00%/5.00%
Year ultimate trend rate is achieved	2020	2020
Mortality	RP2000CH,	RP2000CH,
	generational	generational
	projection	projection

Plan Assets

The defined benefit plan assets are valued utilizing the same fair value hierarchy as the University's investments as described in Note 1d.

The following table summarizes the fair values of investments by major type held by the staff pension plan at June 30, in thousands of dollars:

	Level 1	Level 2	Level 3	2013	2012
Investments, at fair value:					
Cash and cash equivalents	\$ 5,006	\$ -	\$ -	\$ 5,006	\$ 2,414
US government securities	87,746	-	-	87,746	75,254
Common stock:					
Domestic	49,303	-	1,227	50,530	45,231
Foreign	42,986	-	-	42,986	13,385
Total common stock	92,289	-	1,227	93,516	58,616
Common collective trusts	-	33,478	-	33,478	32,578
Registered investment companies:					
Domestic	51,201	-	-	51,201	41,212
Foreign	54,599	-	-	54,599	77,012
Total registered investment companies	105,800	-	-	105,800	118,224
Limited partnerships:					
Absolute return	-	-	189,352	189,352	165,755
Domestic	-	-	48,752	48,752	31,928
Foreign	-	-	59,641	59,641	38,639
Private	-	-	126,742	126,742	127,697
Real estate	-	-	116,216	116,216	102,994
Natural resources	-	-	49,874	49,874	57,965
Total limited partnerships	-	-	590,577	590,577	524,978
Total investments, at fair value	290,841	33,478	591,804	916,123	812,064
Liabilities associated with investments	12,959		-	12,959	1,080
Net investments, at fair value	\$277,882	\$33,478	\$591,804	\$903,164	\$810,984

The following table summarizes the fair values of investments by major type held by the retiree health plan at June 30, in thousands of dollars:

	Level 1	Level 2	Level 3	2013	2012
Investments, at fair value:					
Cash and cash equivalents	\$ 164	\$ -	\$ -	\$ 164	\$ 24
Common stock:					
Domestic	10,308	-	-	10,308	7,676
Foreign	17,531	-	-	17,531	5,321
Total common stock	27,839	-	-	27,839	12,997
Common collective trusts	-	11,497	-	11,497	11,191
Registered investment companies:					
Domestic	39,680	-	-	39,680	55,057
Foreign	37,740	-	-	37,740	39,600
Total registered investment companies	77,420	-	-	77,420	94,657
Limited partnerships:					
Absolute return	-	-	80,837	80,837	71,023
Domestic	-	-	29,499	29,499	15,665
Foreign	-	-	20,688	20,688	12,042
Private	-	-	51,612	51,612	47,572
Real estate	-	-	69,219	69,219	60,958
Natural resources	-	-	25,027	25,027	28,280
Total limited partnerships	-	-	276,882	276,882	235,540
Total investments, at fair value	105,423	11,497	276,882	393,802	354,409
Liabilities associated with investments	54	-	-	54	37
Net investments, at fair value	\$105,369	\$11,497	\$276,882	\$ 393,748	\$354,372

The table below represents the change in fair value measurements for Level 3 investments held by the staff pension plan and the retiree health plan for the plans' year ended June 30, 2013, in thousands of dollars:

	Pension	Retiree Health
Beginning balance	\$ 525,916	\$ 235,540
Realized and unrealized gain, net	84,564	27,363
Purchases	66,248	34,878
Sales	(84,924)	(20,899)
Ending balance	\$ 591,804	\$276,882

The unrealized portion of the gain in Level 3 reported above that relates to assets held at June 30, 2013 by the staff pension plan and the retiree health plan, represents a net gain of \$33.1 million and a net gain of \$18.8 million, respectively.

The investment objective for the pension and retiree health plans seeks a positive long-term total return after inflation to meet the University's current and future plan obligations.

Asset allocations for both plans combine tested theory and informed market judgment to balance investment risks with the need for high returns.

Plan asset allocations by category at June 30 are as follows:

	Pension		Retir	ee Health
	2013	2012	2013	2012
Absolute return	21.0%	20.5%	20.5%	20.1%
Domestic equity	14.3%	13.9%	17.7%	17.7%
Fixed income	9.7%	9.3%	0.0%	0.0%
Foreign equity	19.6%	19.9%	19.9%	19.2%
Private equity	14.0%	16.1%	13.1%	13.7%
Real estate	12.9%	12.8%	17.6%	17.4%
Natural resources	7.2%	7.1%	8.7%	7.8%
Cash	1.3%	0.4%	2.5%	4.1%

The pension and retiree health long-term rate of return assumption is determined by adding expected inflation to expected long-term real returns of various asset classes, taking into account expected volatility and correlation between the returns of various asset classes.

Contributions

Annual contributions for the pension and retiree health plans are determined by the University considering calculations prepared by the plans' actuary as well as other factors. Expected contributions in fiscal 2014 to the pension plan are \$46.2 million, no contribution is planned to the retiree health plan.

Benefit Payments

The following estimated benefit payments, which reflect expected future service, are expected to be paid out of the plans, in thousands of dollars:

Fiscal year	Pension	Postretirement
2014	\$40,960	\$ 26,500
2015	43,585	28,600
2016	46,225	30,800
2017	49,432	33,600
2018	52,971	36,400
2019-2023	321,617	227,400

The federal government provides the University with a Medicare part D subsidy as reimbursement for certain retiree health benefits paid to plan participants. For fiscal 2013, the subsidy is expected to be approximately \$1.5 million, or approximately 6% of retiree health benefits.

12. Endowment Funds

Yale's endowment consists of approximately 7,600 funds established for a variety of purposes. The endowment includes both donor-restricted endowment funds and funds designated by the Yale Corporation to function as endowments. The University endowment fund composition by fund type as of June 30, in thousands of dollars, includes:

		Temporarily	Permanently		
	Unrestricted	Restricted	Restricted	2013	2012
Donor-restricted endowment	\$ (11,954)	\$ 14,308,442	\$ 3,167,254	\$ 17,463,742	\$16,267,448
Board-designated endowment	3,129,615	199,465	-	3,329,080	3,111,660
	\$ 3,117,661	\$ 14,507,907	\$3,167,254	\$ 20,792,822	\$19,379,108

Changes in endowment net assets for the fiscal year ended June 30, in thousands of dollars, were:

		Temporarily	Permanently		
	Unrestricted	Restricted	Restricted	2013	2012
Endowment net assets, beginning of year	\$ 2,933,418	\$13,426,063	\$ 3,019,627	\$ 19,379,108	\$ 19,395,603
Investment return:					
Investment income	65,234	335,260	1,073	401,567	376,628
Net appreciation	316,293	1,571,977	4,988	1,893,258	501,255
Total investment return	381,527	1,907,237	6,061	2,294,825	877,883
Contributions	2,901	9,140	134,990	147,031	137,655
Allocation of endowment spending	(167,773)	(854,217)	2,741	(1,019,249)	(992,149)
Other (decreases) increases	(32,412)	19,684	3,835	(8,893)	(39,884)
Endowment net assets, end of year	\$ 3,117,661	\$ 14,507,907	\$ 3,167,254	\$ 20,792,822	\$ 19,379,108

At June 30, 2013, the total amount of cumulative losses to individual funds in excess of permanently restricted amounts totaled \$12.0 million. These losses are classified as unrestricted net assets.

13. Commitments and Contingencies

The University is involved in various legal actions arising in the normal course of activities and is also subject to periodic audits and inquiries by various regulatory agencies. Although the ultimate outcome is not determinable at this time, management, after taking into consideration advice of legal counsel, believes that the resolution of these pending matters should not have a material adverse effect upon the University's financial position.

Minimum lease commitments at June 30, 2013, under agreements to lease space, in thousands of dollars, are as follows:

	Operating Lease	Capital Lease
	Payments	Payments
2014	\$ 8,310	\$ 9,902
2015	7,993	9,956
2016	7,337	9,919
2017	6,453	9,756
2018	4,696	9,812
Thereafter	50,404	149,530
	85,193	198,875
Executory costs	-	(95,589)
Interest on capital leases	-	(46,738)
	\$ 85,193	\$ 56,548

The University has outstanding commitments on contracts to construct campus facilities in the amount of \$222.1 million at June 30, 2013. Funding for these projects is expected to come from capital replacement reserves, gifts and future borrowing.

The University has entered into certain agreements to guarantee the debt and financial commitments of others. Under these agreements, if the original debt holder defaults on their obligations, the University may be required to satisfy all or part of the remaining obligation. The total amount of these guarantees is approximately \$111.3 million at June 30, 2013.

14. Subsequent Events

Management has evaluated subsequent events for the period after June 30, 2013, through October 24, 2013, the date the consolidated financial statements were available to be issued.

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Detail of the top of Memorial Quadrangle Gate (1918–1922) located at the base of Harkness Tower. This wrought iron gate is one of Yale's ten hand-forged gates by Samuel Yellin, a master craftsman known for designing works of art out of a single piece of iron. *Photo by Michael Marsland*

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