MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Response to Questions in the Letter dated January 24, 2008
of Senator Max Baucus and Senator Charles Grassley
of the United States Senate Committee on Finance

March 3, 2008

Preface

The Massachusetts Institute of Technology (MIT) is an independent, coeducational, privately endowed educational institution whose mission is to advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century. We admitted our first students in 1865, four years after the approval of our founding charter. Our opening marked the culmination of an extended effort by William Barton Rogers, a distinguished natural scientist, to establish a new kind of independent educational institution relevant to an increasingly industrialized America. Rogers stressed the pragmatic and practicable. He believed that professional competence is best fostered by coupling teaching and research and by focusing attention on real-world problems. MIT is dedicated to providing its students with an education that combines rigorous academic study and the excitement of discovery with the support and intellectual stimulation of a diverse campus community. Each year, MIT grants more than 3,000 undergraduate and graduate degrees from our five schools: architecture and planning; engineering; humanities, arts and social sciences; management; and science. Among undergraduates, 85% major in engineering or science.

Science and technology has changed over the last 25 years and our education has changed with it. Today's research requires more than simply textbooks and periodic tables; biology requires high-throughput screening equipment, electrical engineering and computer science require cutting-edge microtechnology laboratories, and physics requires ever faster computational technology. Research once performed by a single investigator in her lab is increasingly done by teams of cross-disciplinary scholars working together to solve the world's most complex challenges. Similarly, the way we teach science and engineering has changed. MIT has invested in state-of-the-art laboratories, small classes with hands-on learning, early research experiences for undergraduates, and increased mentoring and individualized instruction. Thus, both education and research have changed and improved very significantly over the past two decades. At MIT these two missions are connected and complementary.

MIT is a science and technology center for the nation, and thus the source of some of America's greatest innovations. We view our role as profoundly tied to national service – both in the achievements developed by our researchers and the remarkable talent pool we educate and graduate each year.

This document was prepared by the following: Office of the President; Office of the Dean for Undergraduate Education; Office of the Executive Vice President & Treasurer; Office of External Affairs; MIT Investment Management; and the MIT Washington Office.

Key Terms

Corporation	MIT's board of trustees.
Constant Dollars	2007 dollar amounts adjusted for inflation using the Consumer Price Index.
Current Dollars	Actual dollar amounts in the relevant year.
Grants	Money a student receives based on financial need that does not need to be repaid.
Last Ten Years	The period July 1, 1997, through June 30, 2007 covers the last ten completed academic and fiscal years at MIT.
Net Price or Net Tuition	Full tuition and mandatory fees minus MIT grant aid.
Scholarships	Money a student receives based on merit that does not need to be repaid.
Sticker Price	Full tuition and mandatory fees.
Year	Both MIT's academic year and fiscal year are July 1 through June 30.

Question 1 (A) Please provide the number of undergraduate and graduate students year-by-year for the last ten years.

The table below provides the number of undergraduate and graduate students MIT reported to the U.S. Department of Education Integrated Postsecondary Education Data System (IPEDS) for each of the last ten years.

Table 1: Number of Undergraduate and Graduate Students for the Last Ten Years

Academic Year	Undergraduate Enrollment	Graduate Enrollment	Total Enrollment
1998	4,381	5,499	9,880
1999	4,372	5,513	9,885
2000	4,300	5,672	9,972
2001	4,258	5,832	10,090
2002	4,220	5,984	10,204
2003	4,178	6,139	10,317
2004	4,112	6,228	10,340
2005	4,136	6,184	10,320
2006	4,066	6,140	10,206
2007	4,127	6,126	10,253

Enrollment, as defined in the IPEDS instructions, is students enrolled in courses creditable toward a diploma, certificate, degree, or other formal award.

Question 2 (A) Please provide the total cost of undergraduate tuition (including all fees) -- both sticker and average, mean and median -- year-by-year for the last ten years.

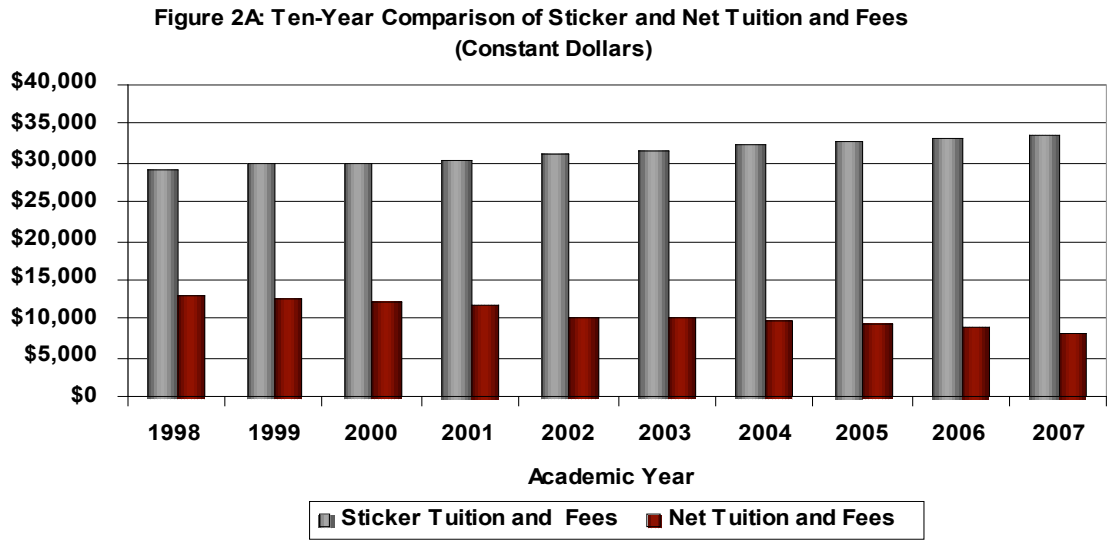
The table below provides the annual undergraduate tuition, including the mandatory student activity fee, for each of the last ten years. MIT has one tuition and fee structure for all undergraduates. Accordingly, MIT's sticker tuition and fees, average and mean tuition and fees, and median tuition and fees are the same. Information about *net* tuition is provided beneath the table and in the response to Questions 2(B)-(D) and 3.

Table 2A: Undergraduate Tuition and Fees for the Last Ten Years

Academic Year	Sticker, Average, Mean and Median Tuition and Fees	Percentage Change from Prior Year
1998	$23,100	
1999	$24,050	4.11%
2000	$25,000	3.95%
2001	$26,050	4.20%
2002	$26,960	3.49%
2003	$28,230	4.71%
2004	$29,600	4.85%
2005	$30,800	4.05%
2006	$32,300	4.87%
2007	$33,600	4.02%
Average Annual Growth Rate		**4.2%**

The real story is not the increase in the sticker tuition and fees, but the decrease in what MIT undergraduate families actually pay.

Because the growth in grants from MIT (see Table 2B) greatly exceeds the growth in tuition, our undergraduates are, on average, paying almost 15% less than they paid ten years ago, adjusting for inflation (see Figure 2A below). Our MIT grants significantly reduce the sticker price for a large percentage of students – six out of every ten undergraduates receive an MIT grant. Between 1998 and 2007, MIT more than doubled its undergraduate need-based grants. The average annual growth rate of MIT's total tuition assistance from 1998 to 2007 was over 9%, which is significantly greater than the 4.2% average annual growth rate for our sticker price for tuition and fees over the same period.



Net "tuition and fees" is defined as the average amount MIT grant recipients and their families actually pay for tuition and fees. It is calculated by subtracting the average MIT grant from sticker tuition and fees.

The price of an MIT education is further reduced through grants and scholarships from federal, state and private sources. When including all sources and types of assistance, fully 90% of our students receive some form of financial aid. We ensure that financial aid from federal, state and private sources benefit students directly, by allowing students to use these external grants and scholarships to reduce their borrowing and term-time work rather than replacing MIT grants.

Question 2 (B) Please provide the amount of tuition assistance (not including loans or work study) that the university has provided to undergraduate students year-by-year for the last ten years.

The table below provides the total amount of tuition assistance that MIT has given undergraduates for each of the last ten years. This tuition assistance is always in the form of a grant, which is funded from MIT's internal resources, including endowment, current gifts, and general Institute funds.

Table 2B: University Tuition Assistance to Undergraduates for the Last Ten Years		
Academic Year	**MIT Grants to Undergraduates**	**Percentage Change from Prior Year**
1998	$27,554,738	
1999	$30,314,555	10.02%
2000	$30,519,190	0.68%
2001	$33,531,373	9.87%
2002	$38,565,187	15.01%
2003	$42,394,055	9.93%
2004	$46,973,824	10.80%
2005	$50,222,222	6.92%
2006	$54,386,486	8.29%
2007	$60,896,832	11.97%
Average Annual Growth Rate		**9.2%**

In our current academic year, 2007-2008, our financial aid budget increased to over $66 million. A distinguishing feature of the MIT undergraduate financial aid program is that an MIT grant is the largest portion of financial aid received by MIT undergraduates, whereas the largest portion of financial aid received by most undergraduates in the U.S. is a federal student loan. As the table above indicates, between 1998 – 2007, MIT reduced the need for its students to take out loans by more than doubling the assistance it provides to undergraduates.

Question 2 (C) For the most recent year, please provide the percentage of students receiving university grants (for example 25%; 50%; 75% and 100%) of tuition and fees.

The table below provides the percentage of undergraduates receiving MIT grants for the most recent year and the value of those grants in relation to sticker tuition and fees.

Table 2C: Percentage of Undergraduates Receiving University Grants for the Most Recent Year						
Academic Year	Tuition and Fees	Receiving MIT grants less than 24.99% of tuition and fees	Receiving MIT grants equal to 25-49.99% of tuition and fees	Receiving MIT grants equal to 50-74.99% of tuition and fees	Receiving MIT grants equal to 75-99.99% of tuition and fees	Receiving MIT grants equal to or greater than 100% of tuition and fees
2007	$33,600	5%	8%	12%	17%	16%

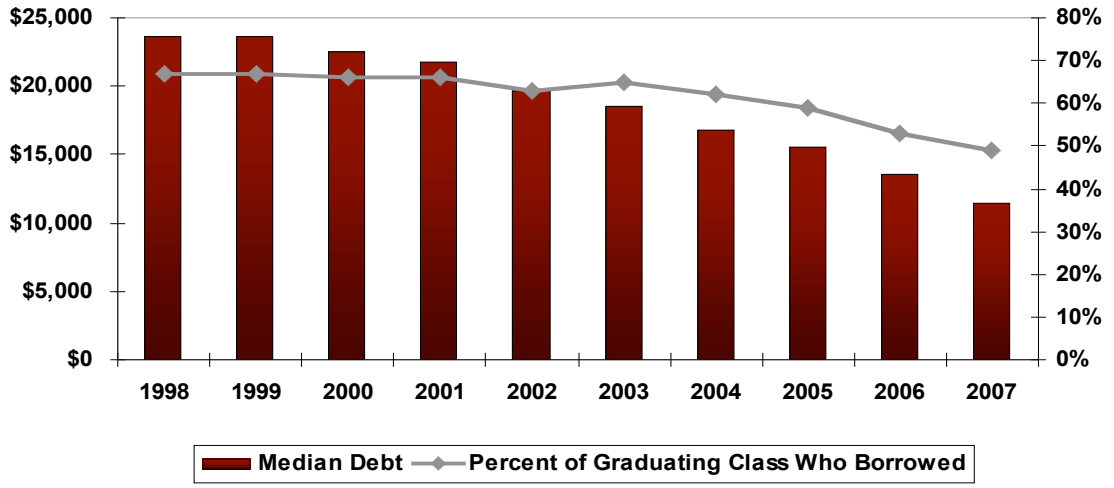
An increasing number of MIT students are seeing 100% of their tuition and fees covered by a grant or scholarship. In 2006-2007 - as noted in the table above - 16% of MIT undergraduates received an MIT grant greater than tuition and fees. That percentage increased to 20% for 2007-2008.

Twenty-seven percent of MIT undergraduates have grants and scholarships from all sources - including MIT, the federal government, state governments, and private sources – more than tuition and fees.

During the past decade our students have decreased their reliance on student loans. We accomplished this by allowing students to use grants and scholarships from sources outside of MIT to replace their student loan and term-time work requirements, rather than using these external grants scholarships to reduce our MIT grant expenditures. Our innovative Federal Pell Grant Matching Program in which we match Pell grants dollar for dollar has significantly decreased debt for low-income students.

As a result, between 1998 and 2007, median undergraduate debt at graduation decreased 51% from $23,640 to $11,500. The number of undergraduates in the senior class with debt at graduation has also dropped dramatically, from 702 (67%) in 1998 to 477 (49%) in 2007. In last year's graduating class, more than half graduated from MIT with zero financial aid debt.

Figure 2 C: Ten-Year Undergraduate Debt (Current Dollars)



Question 2 (D) What is the average grant amount?

The average MIT grant for 2006-2007 was $25,181.

Question 3 (A) Please explain your university's financial aid policy.

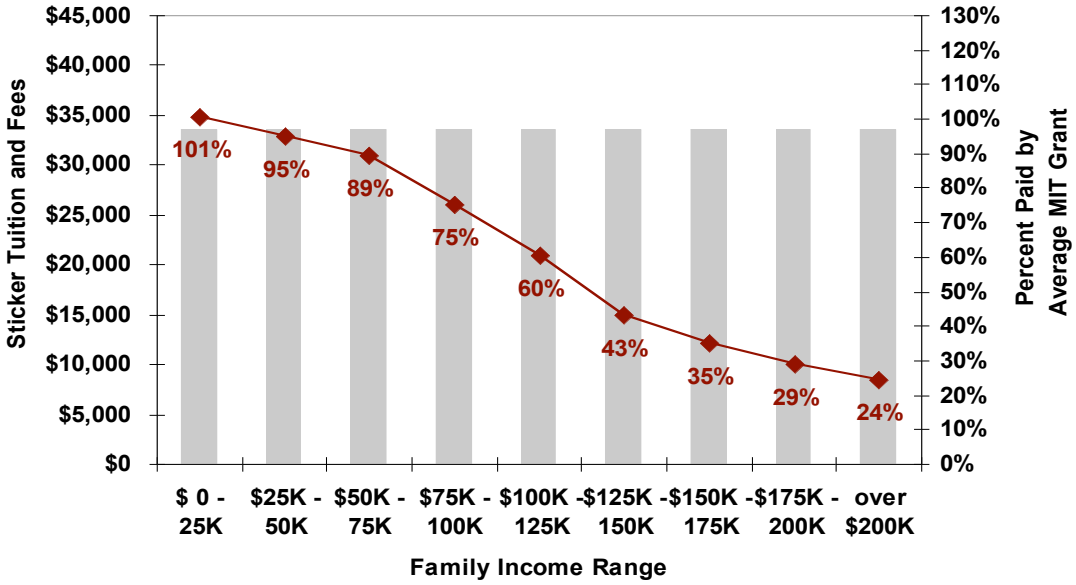
Our financial aid policy is based on our core value that the cost of attending MIT will not be a barrier for qualified students. MIT subsidizes the cost of educating our students by setting our tuition rates at less than one-half of our true costs; students pay only a portion of what it actually costs to educate them. Even after greatly subsidizing the cost of tuition, we make prudent use of our remaining available resources to ensure that MIT's sticker price is not a financial barrier for qualified students. Our success in communicating this message can be seen by the strikingly high percentage of our admissions candidates – 80% – who apply for financial aid. They know we make all our admission decisions based on a candidate's strengths, talent and promise, not ability to pay and that we award all our aid based on financial need. We do not award any academic, athletic or other forms of merit scholarships.

Our financial aid policy is straightforward. We use the College Board's institutional methodology as our basis for determining what parents can contribute towards our total sticker price (for some parents the amount is zero). We take into account parents' income and assets, expenses and debts, and the number of people dependent on those financial resources and the current and future education costs of those individuals. We meet the full difference between what we expect the family to contribute and our total price – including tuition, fees, room, board, books, supplies, personal expenses and travel.

Our financial aid policy meets undergraduates' entire financial need. We expend whatever amount is necessary to fill the gap between our students' financial needs and external sources of funding – federal, state and private. Regardless of slow-downs in the economy, failure of other funding sources to keep pace with inflation, or unforeseen family circumstances, MIT meets 100 percent of each student's financial need. This is why in the ten-year period between 1997 and 2007 our undergraduate grant expenditures more than doubled.

Our financial aid policy results in successful outcomes. Average MIT grants cover a significant percentage of tuition and fees for our undergraduates. This makes it possible for low-, middle- and upper-middle income families to send their children to MIT as demonstrated by the figure below.

Figure 3 A: Average MIT Grants by Family Income: 2006-2007 Academic Year



Grant recipients as percentage of all undergraduates	$0 - 25K	$25K - 50K	$50K - 75K	$75K - 100K	$100K - 125K	$125K - 150K	$150K - 175K	$175K - 200K	over $200K
	9%	8%	11%	11%	9%	6%	3%	2%	1%

Question 3 (B) How do you inform students and parents of that policy?

MIT uses both traditional and innovative means to communicate our admissions and financial aid policies to prospective students. Examples include direct mailings, high school visits by admissions staff and local alumni/ae, joint travel with peer institutions, daily tours/information sessions for the general public, and blogs which hold special appeal for current pre-college students.

Admissions and financial aid is prominently featured on the MIT home page, which offers easy access to all students and families. Clicking the admissions tab allows a prospective applicant to register in a state-of-the-art student portal that provides access to customized information, as well as an opportunity to blog with current students. One of our blog threads addresses issues of concern for low-income and minority students.

Clicking financial aid on the MIT home page brings the visitor to the Student Financial Services web site, which features easily understandable information about financial aid with application instructions. The website features real success stories in students' voices. What follows is an excerpt from the website that demonstrates how such case studies can be used to powerful effect:

> I was incredibly pleased when I received my financial aid award letter. The aid was so generous that MIT actually became my most affordable option for college. If I'd attended my second-choice school, I would have had to take on about

> $20,000 a year in debt. I currently have no debt during my second year at MIT. . . Not applying to MIT because of the price tag could be the biggest mistake of your life. There are amazingly generous people who have made it possible for anyone to be able to afford MIT if they are accepted. Coming to MIT, living in a city on the coast, and getting an MIT degree are life-changing experiences that will open doors to a new life and give you the ability to improve your family's situation. Apply, and if fate brings you here, the financial aid office will make sure your financial situation doesn't hold you back.
> http://web.mit.edu/sfs/students/doyle.html

Question 3 (C) What outreach efforts does your university take to recruit potential low-income students?

MIT uses extensive recruitment to ensure access. Because science and engineering are careers that have traditionally opened the routes of upward social mobility in the United States, MIT has committed significant infrastructure and funding to recruit, enroll, retain, and graduate low-income, first generation, and under-served students. Each year approximately 16% of our undergraduates are first in their family to attend college and 14% are Federal Pell Grant recipients.

We have a number of programs devoted to low-income recruitment, such as specific visits and presentations. We engage in relationship building activities with community based organizations that identify students for us. We allocate a large portion of our general recruitment efforts toward low-income students, such as our fall travel, direct mail, and on-campus programming. MIT's "Fly In" program provides transportation and expenses for select low-income high school juniors to visit MIT and learn about applying to college. We also provide assistance for all admitted low-income students who want to visit MIT in the spring to attend our Campus Preview Weekend. We are a sponsor of the Center for Student Opportunity, an organization that reaches out to low-income students around the country. In addition, individual departments at MIT have specific diversity and recruitment initiatives.

MIT uses resources to prepare low-income students for college – at MIT and elsewhere. For more than three decades we have had free programs to narrow the achievement gap and improve college attendance for low-income students. We recognize the importance of including parents in these programs and we use our own students as role models. We develop partnerships with community organizations to identify potential candidates for our extensive and tailored programs. The following are examples of our free programs.

> **MITES (Minority Introduction to Engineering and Science)** is a rigorous six-week residential, academic enrichment summer program for promising high school juniors interested in studying and exploring careers in science, engineering, and entrepreneurship. MITES, which just celebrated its 34th year of supporting under-served students, takes pride in helping students develop confidence in themselves when tackling the world's science, math and engineering-based problems. This program is 100% scholarship-based from

funding from industry, foundations, and individuals. For its graduates, there is a strong record of successful admission to MIT and other engineering and science universities. Over the years MITES has developed a distinguished alumni based, including leading engineers, scientists, physicians, professors and entrepreneurs.

The Saturday Engineering Enrichment and Discovery (SEED) Academy is an academic enrichment and career exploration program for public high school students from Boston and Cambridge. Its primary mission is to increase the number of traditionally under-served local students in the pipeline for academic and professional careers in technical fields. We provide participants with an interesting, hands-on curriculum that strengthens their foundational math, science and communication skills; a challenging learning environment with high expectations; and access to positive role models. SEED includes parents' programming as we know that children whose parents are supportive and involved in their educational and extracurricular activities perform better in school. This seven-semester program is offered free of charge to participants through the generous support of our sponsors and MIT.

SciPro offers under-served teenagers in Boston and Cambridge an experience conducive to increased science enthusiasm and academic success. Participating middle and high school students are engaged in projects of their choice, working one-on-one with MIT mentors. They have the opportunity to present their projects to family and friends, enter science fairs, or enjoy the fruits of their scientific exploration in other ways. The program provides all necessary supplies, as well as science demos, field trips, and lunch. The MIT Public Service Center began SciPro in 2001 with students from several schools in the area. Students' experience is enriched not only through their interaction with various mentors with specialties in a wide array of scientific fields, but, more importantly, through the rapport they develop with their personal mentor.

STEM (The Science Technology Engineering and Math) Program is a year-round academic enrichment opportunity provided free of charge to talented middle school students who want to get ahead in math and science. STEM offers a five-week Summer Institute on MIT's campus for students entering sixth, seventh, eighth or ninth grade. Taught by MIT undergraduates, the Summer Institute courses combine lectures, projects and experiments to support active learning. STEM also offers a nine-month mentoring program which matches each middle school participant with an MIT student mentor, who shares similar interests. Parents of STEM participants are also invited to participate in regular Parents' Programming seminars. This program was launched by MIT in partnership with the Center for the Advancement of Hispanics in Science and Engineering Education (CAHSEE) and is geared toward low-income students.

Retention programs to achieve successful outcomes. MIT places strong emphasis on student support, academic, and retention initiatives for all of our incoming students. There are several programs developed specifically for first-generation, low-income, and minority students involving all aspects of the academic experience. These programs are

developed and operated through Institute-wide initiatives and funding from the President, the Provost, Department Heads, Deans, and Directors.

Question 3 (D) How is low-income defined?

We target low-income students in our outreach without finding it necessary to have a definition of low-income. We focus on recruitment efforts in cities and rural areas where we are aware that families predominantly come from lower socio-economic backgrounds. Because we do not have access to students' financial records during the recruitment phase, we use various proxies to target our low-income efforts. We focus on schools with a high number of students on free or reduced lunch and Title 1 schools. We become aware of low-income students in our admissions process when we see application fee waivers, and we pay attention to students whose parents did not graduate from college.

Question 3 (E) What is the amount spent on these efforts?

We were the first private university to target the recruitment of Pell Grant recipients by matching their Pell award dollar for dollar. This initiative alone costs us approximately $2 million annually.

The total estimate of salary and operation allocations just from the Office of Admissions is an additional $ 1 million annually.

Beyond these obvious amounts spent on low-income recruitment it is difficult to quantify all our efforts because we offer an extensive array of programs to recruit, enroll, retain and graduate low-income students.

Rather than measuring our efforts by inputs – dollars spent – we measure by outcomes. We have a first-year undergraduate retention rate of 98% and a 93% graduation rate in 6 years.

QUESTION 4 (A) Who determines and decides when tuition increases are necessary?

Determining tuition and financial aid is a deliberative process that requires the participation of administrators, faculty, students and the governing board, as discussed in detail below.

QUESTION 4 (B) What is the process for making this decision?

The process begins with the Committee on Undergraduate Admissions and Financial Aid (CUAFA), a standing committee of the MIT Faculty. CUAFA is charged with policy setting for the Admissions Office and the Financial Aid Office. This includes not only the selection process itself but also recruitment (ensuring that the best students are in our applicant pool) and yield (encouraging those who have been offered admission to accept). Financial aid figures prominently in the latter. CUAFA consists of six elected Faculty members, three undergraduate students, one graduate student, and, ex officiis, the Dean

for Undergraduate Education, the Dean of Admissions, the Executive Director of Student Financial Services, and one member designated by the Dean for Undergraduate Education.

CUAFA recommends financial aid enhancements to the Enrollment Management Group (EMG). The EMG is chaired by the Dean for Undergraduate Education and includes the Chair of CUAFA and senior administrators from around the Institute. Each year EMG develops recommendations for (1) increases in tuition, fees, and room and board; (2) any potential changes in financial aid policy; and (3) the target size for the entering class.

The recommendations of CUAFA and EMG are presented to the Academic Council. The Council is chaired by the President and consists of the Institute's senior officers and the elected Chair of the Faculty. The group meets weekly during the academic year to confer on matters of Institute policy. Each winter, the EMG makes a formal presentation to Academic Council with its tuition recommendations for the coming year. Traditionally, the Presidents of the Undergraduate Association and the Graduate Student Association (the two primary student governance organizations) are invited to attend the meeting as guests. Following input from the Academic Council, tuition and financial aid recommendations inform the work of the Office of the Provost and the Office of the Executive Vice President and Treasurer as they prepare the pro forma budget for presentation to the Executive Committee of MIT's Corporation.

The Corporation, known at other institutions as the Board of Trustees, is comprised of approximately 74 active members, primarily MIT alumni, who are distinguished leaders in science, engineering, industry, education and public service. Members of Recent Graduating Classes are also appointed to the Corporation to provide an important perspective, including on access and affordability issues. MIT's Corporation is unusual in its size and the commitment of its members, because all of them must participate in detailed, ongoing, and formal performance evaluations of every school, department, division, and major program at the Institute.

The Executive Committee, a subset of the full Corporation, is charged with "responsibility for general administration and superintendence of all matters relating to the Corporation." The Executive Committee is chaired by the President and includes eight members of the Corporation, the Chairman of the Corporation, the Treasurer of the Corporation, and features the Provost, the Secretary of the Corporation, and the General Counsel as regular advisers. The Executive Committee devotes substantial time to the discussion of MIT's budget processes, financial planning, and the management and enhancement of the Institute's resources. The Executive Committee discusses the tuition and financial aid recommendations in their February meeting and votes on the tuition and financial aid policies. After review by the Corporation at its March meeting, tuition and financial aid decisions are publicly announced.

QUESTION 4 (C) Does the full Board of Trustees vote on tuition increases?

The Executive Committee of the Corporation votes on tuition and financial aid policies and presents them to the Corporation, MIT's board of trustees, for discussion and recommendations.

QUESTION 4 (D) Are students, parents and the public provided an opportunity to comment on tuition increases prior to final decisions being made?

As discussed in the response to Question 4 (B), undergraduate and graduate students are engaged in the process of tuition setting formally through CUAFA, and informally through their interactions with EMG and members of the Academic Council. Members of Recent Graduating Classes on the Corporation provide an important perspective on access and affordability issues.

QUESTION 4 (E) What role does your university endowment play in providing financial assistance to students?

MIT's endowment provides financial assistance to students by:

- underwriting the cost of providing an education to all MIT students
- funding the financial need of undergraduates with grants
- funding stipends/scholarships/grants for non-tuition related expenses of students

As with most other universities, MIT's endowment is comprised of a wide range of pooled assets which are designed to provide for its long term support. At the end of 2006-2007, the MIT endowment is held and administered in 2,898 separate funds established to meet separate donor requirements. Endowed funds restricted only for undergraduate grants account for approximately 13% of value of the endowment; this is our second largest endowment category behind professorships (see responses to Questions 9E and 10C). These funds are important to funding financial aid for our undergraduates, during the last ten years they covered an average of 71% of MIT's undergraduate financial aid expenditures. The remaining 29% was met by using unrestricted (General Institute Budget) sources. MIT has used the General Institute Budget to fund undergraduate grants since it made its commitment to need-blind admissions more than forty years ago.

Beyond funding the financial aid budget itself, the endowment plays a vital role in underpinning other elements of an MIT education. MIT is dedicated to making its full range of learning opportunities – research experience, independent study, study abroad, community service – available to all of its students. Endowment returns, from both restricted and unrestricted sources, are partly responsible for ensuring these programs remain accessible to all students, not just to those who can afford to pay for them. For example, some endowments are dedicated to MIT Service Fellowships (stipends and grants) that enable low-income students to participate in service learning programs instead of working over the summer. The Institute also pays travel expenses for students participating in research programs abroad so that cost is not a barrier to the experience. These are just some examples of how MIT uses its endowment to underwrite the full

range of undergraduate education.

Also, as discussed in Question 2, MIT undergraduates and their families pay only a fraction of what it costs us to provide an MIT education. MIT's endowment is used to subsidize the cost of providing the Institute's education to our students, thereby reducing the tuition price paid by students and families.

Question 5 (A) Please explain how your university's endowment is managed and the role of the Board of Directors?

The MIT Investment Management Company ("MIT Investment Management"), an unincorporated division and constituent part of MIT established in 2003, manages the MIT endowment. The MIT Investment Management Board of Directors (the "MIT Investment Management Board") manages and oversees the activities and affairs of MIT Investment Management. The Executive Committee of the MIT Corporation (MIT's governing body) appoints the MIT Investment Management Board.

MIT Investment Management's duties and responsibilities include the following:

- The MIT Investment Management Board establishes the risk-return objectives, admissible asset classes and types of direct investments, asset allocation targets and ranges, and similar policy and strategy statements and guidelines.
- MIT Investment Management makes allocations to outside investment managers in approved asset classes and consummates approved types of direct investment transactions.
- MIT Investment Management provides general investment management services for MIT's endowment and it retains and oversees external managers who are responsible for the management of MIT endowment assets. MIT Investment Management is responsible for the selection, liaison, and oversight of the custodian of the MIT endowment, subject to the approval of the MIT Executive Committee.

The MIT Investment Management Board consists of between nine to eleven appointed members selected by the Executive Committee and four members of MIT's senior administration. The appointed members serve staggered terms. The MIT Investment Management Board meets on a quarterly basis.

The MIT Investment Management President is appointed by the MIT Investment Management Board with the concurrence of the MIT President and the MIT Corporation Chair. Subject to the authority of the MIT Investment Management Board, the MIT Investment Management President has general charge and supervision of MIT Investment Management's day to day activities.

Question 5 (B) What are your university's endowment payout and investment policies?

Spending Policy

We define "spending policy" as the policy governing the flow of funds paid out of the endowment in support of MIT's operating budget. MIT's spending policy is based on the well-established economic concept of "intergenerational neutrality." Recognizing that MIT's mission of education, research, and service will be as important and relevant over the long term as it is today, MIT seeks a spending policy that will offer the same support to tomorrow's students as it does to today's students, and is consistent with its fiduciary obligations established by state law. Maintaining intergenerational neutrality does not prevent MIT from growing but rather aims to ensure that MIT's mission-driven programs of education and research will be supported in the future as they are supported today.

It should be understood that at MIT, like other universities, a high percentage of operating costs are fixed costs. These costs are predominantly labor costs for instruction and research; they cannot be cut significantly without damaging academic performance and quality. In addition, MIT's operating costs have been rising at a significantly higher rate than the consumer price index because of the escalating cost of high quality advanced science and engineering equipment, facilities, research, and related education. High fixed costs rising at these rates dictate an endowment spending policy that protects long term purchasing power in its pursuit of intergenerational neutrality. Given high and escalating fixed costs and endowment investment return volatility, a fixed, inflexible endowment spending rate would be inappropriate and could harm both the current and long-term fulfillment of MIT's mission.

With intergenerational neutrality in mind, MIT employs a spending policy with two primary goals: to provide a significant and stable flow of funds to the operating budget and to maintain the long-term purchasing power of the endowment. The significant and stable flow of funds to the operating budget provides resources to today's generation of scholars. The maintenance of the long-term purchasing power of the endowment ensures MIT can provide adequate resources to future generations of scholars. To achieve this balance, MIT follows the basic principles of the widely accepted Tobin Rule, an endowment spending policy named after the Nobel Prize-winning economist who developed it, that is used by many university endowments.

By definition, then, MIT must necessarily make trade-offs in the pursuit of these two competing goals in order to strike an appropriate balance. A one-sided policy aimed solely at satisfying today's needs argues for consistent increases in spending unrelated to short-term endowment performance to allow for steadfast programmatic support on an inflation adjusted basis. In severe down markets, or periods of growing inflation, such a policy could permanently damage MIT. During periods of poor endowment performance, consistent spending increases would dramatically and perhaps permanently erode the purchasing power of the endowment.

Satisfying future generations of scholars, on the other hand, argues against significant current spending at fixed levels and for spending that fluctuates with changes in endowment market value. Under a policy following this consideration exclusively, declines in endowment value would be immediately followed by declines in spending, in order to prevent erosion in long-term purchasing power and protecting resources for future generations. This policy would result in significant and disruptive volatility in the flow of funds to the operating budget.

The ideal spending policy acts as a shock absorber keeping short-term spending relatively stable but gradually allow changing endowment values to filter into changes in spending. A properly functioning shock absorber allows MIT to pursue investment strategies that generate high returns over the long-term while reducing concern over the short-term impact of market volatility on its operating budget.

Investment Policy

MIT sets its investment policy consistent with the needs of MIT's mission and the fiduciary obligations established by state law.

The most important goal of MIT's endowment investment policy is the generation of high real rates of return. High real rates of return help provide the resources that allow MIT to maintain its standing among centers of academic learning worldwide. High real rates of return also ease the tension between current and future generations by providing significant resources to all generations of MIT scholars.

To generate high real rates of return, MIT's investment policy favors equity investments over fixed income instruments. Finance theory and historical data both establish the superiority of equity investments over fixed income instruments. Finance theory dictates that equity-holders, as owners of assets, should outperform because they take greater risk of price fluctuation but benefit from underlying real growth in profits. Holders of fixed income instruments, on the other hand, get the benefit of relative price stability but earn only fixed nominal coupons. Providing empirical support to academic theory, equity investments have vastly outperformed fixed income investments over long periods of time. In the 20th century, for example, U.S. equities produced an annualized growth rate of 6.7% real versus 2.1% real for U.S. long bonds and 1.0% real for U.S. Treasury bills.

The second goal of MIT's investment policy is stability. Unfortunately, high rates of returns in and of themselves often come with significant volatility. U.S. small capitalization stocks provide an excellent case in point. Investors in 1900 seeking high returns in the U.S. could have invested their portfolio entirely in small capitalization stocks and produced spectacular results over the next century. Unfortunately, the spectacular returns over the long-term were accompanied with jaw-dropping volatility. Between October 1929 and June 1932, small capitalization stocks in the U.S. lost approximately 90% of their value. While small cap stocks eventually

recovered, few investors had the stomach to hold on and no institution could tolerate such volatility in its endowment and the resulting disruption to its operating budget.

Many investors gain stability in their portfolios by maintaining significant fixed income exposure, albeit at the expense of the long-term returns. To reduce portfolio volatility without sacrificing return potential, MIT invests in equity strategies that are uncorrelated, or respond differently to different economic environments. When one arena posts poor results, another should do well. In this manner, MIT combines uncorrelated high returning investments to form a high returning but low volatility portfolio that supports the needs of all generations of MIT scholars.

MIT primarily makes investments through external fund managers. Working with external fund managers allows MIT to tap into the best investment talent available globally. By identifying a wide variety of top-tier investment managers with specific competencies, MIT is able to construct a broadly diversified portfolio while accessing deep sector expertise. MIT maintains close ties with its investment managers, opportunistically allocating capital to those uncovering the most attractively valued situations.

Question 5 (C) What is the mission of your university's endowment?

The mission of MIT's endowment is to provide financial support to further MIT's mission of education and research.

The true cost of providing an MIT education to our students – 85% of whom study science or engineering – significantly exceeds the tuition revenue we receive. MIT's endowment is used to subsidize the cost of providing this education and to award need-based scholarships, further reducing the price paid by students and families. As described in Question 2, between 1998 – 2007, net tuition decreased almost 15% adjusting for inflation as MIT more than doubled the assistance it provided to undergraduates. This level of affordability, at a time of escalating costs for providing a quality science education, is made possible by the growth in MIT's endowment.

Question 5 (D) When was the last time that the university's endowment policy was reviewed? When will it next be reviewed?

MIT's endowment investment policy is formally reviewed and approved by the MIT Investment Management Board on an annual basis. This last occurred at the May, 2007 quarterly meeting of the MIT Investment Management Board. In addition, the MIT Investment Management Board reviews endowment investments at each quarterly meeting.

The MIT endowment spending policy is presented, reviewed and approved by the MIT Executive Committee on an annual basis.

Question 6 (A) Please provide the year-by-year net growth of the university's endowment for the last ten years (in both percentage and dollars).

The table below shows the net growth of MIT's endowment (in both percentage and dollars) each year for the last ten years.

Table 6A: Ten-Year Growth of MIT Endowment			
Fiscal Year	Net Endowment Value at Year End (in millions)	Net Endowment Growth (%)	Endowment Growth (in millions)
1998	$ 3,678.2	21.6%	$ 654.6
1999	$ 4,287.7	16.6%	$ 609.5
2000	$ 6,475.5	51.0%	$ 2,187.8
2001	$ 6,134.7	-5.3%	$ (340.8)
2002	$ 5,359.4	-12.6%	$ (775.3)
2003	$ 5,133.6	-4.2%	$ (225.8)
2004	$ 5,869.8	14.3%	$ 736.2
2005	$ 6,712.4	14.4%	$ 842.6
2006	$ 8,368.1	24.7%	$ 1,655.7
2007	$ 9,980.4	19.3%	$ 1,612.3

The net growth of the MIT endowment from year to year is measured by comparing the size of the endowment at the end of our academic year with the size of the endowment at the end of the immediately prior year. The size of the endowment at the end of a year is equal to (1) the size of the endowment at the end of the immediately prior year, plus (2) endowment investment gains and net income over the year, plus (3) gifts allocated to the endowment over the course of the year, minus (4) endowment spending – i.e., distribution to MIT's operating budget -- over the course of the year.

Question 6 (B) What is the amount of donations the endowment has received year-by-year for the last ten years?

The table below shows the aggregate amount of donations received into MIT's endowment each year for the last ten years.

Table 6B: Donations to the Endowment*	
Fiscal Year	Fiscal Year (in thousands)
1998	$ 52,403
1999	$ 81,597
2000	$ 98,141
2001	$ 36,890
2002	$ 38,918
2003	$ 21,845
2004	$131,656
2005	$ 36,958
2006	$ 56,457
2007	$ 98,750

**"Donations" means gifts actually received into the endowment and does not include amounts that are pledged but not yet received.*

MIT is fortunate that generations of alumni believe strongly in the Institute's mission of research and education. By donating to MIT they are investing in the next generation of scholars who seek to solve challenges that affect all Americans from energy to cancer to national security. However, as reflected in the table set forth above, the amount of donations received from one year to the next can vary to a significant degree. Much like the net changes in the endowment, donations vary depending on numerous factors, with prevailing market performance strongly influencing the amount received in any given year.

Question 6 (C) Please provide the percentage of investment in each asset class (equity, fixed income, hedge funds, private equity, venture capital, etc.) and the amount invested outside the United States.

The established asset classes employed by MIT and the allocation targets for investments in each asset class for the fiscal (academic) year ending June 30, 2008 are as follows:

Table 6C: 2008 Target Allocations for Endowment	
Asset Class	Target Allocation
Marketable Alternatives*	23.0%
Private Equity**	20.0%
Domestic Equity	13.0%
International Equity	12.0%
Real Assets	10.0%
Real Estate	8.5%
Fixed Income	7.5%
Emerging Markets Equity	6.0%

** Marketable alternative investments are broadly defined to include non-traditional investment strategies whereby the majority of the underlying securities are traded on public exchanges or are otherwise readily marketable. These types of investments can generally be categorized as equity hedge funds or absolute return hedge funds.*

*** Private equity investments generally consist of investments in the equity securities of private businesses and are held either through limited partnerships or as direct ownership interests.*

Actual investment in the above asset classes may vary from the target allocations at any given point in time.

The asset classes shown in the table above result from MIT's endowment investment policy. Under Massachusetts law, in making and retaining endowment investments, endowment fiduciaries are required to exercise ordinary business care and prudence under the facts and circumstances prevailing at the time of the investment and, in so doing, are to consider the long and short term needs of the institution. Toward that end, each year the MIT Investment Management Board adopts an endowment investment policy.

18% of the endowment is targeted with fund managers toward investment outside of the U.S. (international equity and emerging market equity). In addition to these investments, many of our other fund managers have the discretion to move capital among U.S. and non-U.S. investments, depending on market conditions. Consistent with prudence and care standards to meet long and short term institutional requirements, MIT has no "hard" target figure for the amount of the endowment invested outside the United States and has a general bias in favor of investing in the United States.

Question 7 (A) Please explain how you determine what is considered part of the university endowment. In other words, how is your endowment defined?

Massachusetts law and MIT practice determine what assets are allocated to, and therefore included in, the MIT endowment.

MIT looks to Massachusetts law in the first instance to determine what is required to be characterized as an endowment fund. Under Massachusetts law, an "endowment fund" is defined as a fund held by an institution which is "not wholly expendable by the institution on a current basis under the terms of the applicable gift instrument." Massachusetts General Laws, Chapter 180A, §1(3). In addition, under Massachusetts law a donor has the right to impose a legally enforceable restriction on her/his gift to a charity.

As of the end of the 2007 academic year, MIT's endowment was comprised of 2,898 separate funds, a portion of which (about 82% of the funds) were restricted by the donors and a portion of which is made part of the endowment by virtue of a vote of the Executive Committee. See Question 10(E) below.

Question 7 (B) Are there any other long term investments that are not included in the endowment as reported to NACUBO? If so, what are they and what are their values?

All property held for long-term investment is held in the MIT endowment. All figures related to the MIT endowment were reported to NACUBO.

MIT holds certain parcels of real estate in the immediate vicinity of its campus in its general operating budget in anticipation of meeting MIT's academic needs. These parcels are not held for investment purposes nor are they managed to maximize return.

Question 8 (A) What has been the cost of management of the endowment year-by-year for the last ten years?

The table below shows the cost of managing MIT's endowment (in both dollars and in basis points as a percentage of endowment value at year end) each year for the last ten academic/fiscal years.

Table 8A: Cost of Endowment Management		
Fiscal Year	Cost of Endowment Management* (in dollars)	Cost as a % of Endowment (in basis points)
1998	$3,310,968	0.09 bps
1999	$3,355,105	0.12 bps
2000	$4,556,451	0.07 bps
2001	$5,868,606	0.10 bps
2002	$6,296,822	0.12 bps
2003	$6,276,648	0.12 bps
2004	$6,928,004	0.12 bps
2005	$7,015,609	0.11 bps
2006	$8,709,561	0.11 bps
2007	$9,990,193	0.10 bps

As set forth above, MIT Investment Management manages the MIT endowment. In addition to the MIT endowment, MIT Investment Management also manages the MIT Basic Retirement Plan as well as the MIT Welfare Benefit Plan for MIT employees. The figures reflected above represent that portion of MIT Investment Management's expenses which are allocable to its management of the MIT endowment, when MIT Investment Management expenses are allocated to the endowment in the same ratio as the value the endowment bears to the aggregate value of the endowment and the two plans that MIT Investment Management manages.

Before the establishment of MIT Investment Management in 2003, the MIT endowment was managed by the MIT Office of the Treasurer. In addition to managing the MIT endowment, the Office of the Treasurer managed the MIT Basic

Retirement Plan as well as the MIT Welfare Benefit Plan. The Office of the Treasurer also included the Office of the Recording Secretary and, in addition, oversaw other MIT related finance matters. The figures reflected above represent that portion of the Office of the Treasurer's expenses which are reasonably allocable to its management of the MIT endowment when Office of the Treasurer expenses are allocated as described above.

The expenses which comprise the cost of the management of the MIT endowment include the compensation paid to MIT Investment Management employees, general operating costs, the fee paid to the endowment custodian firm, rent and legal expenses, excluding management fees paid out of the endowment to external fund managers.

Question 9 (A) What was the payout (both in dollars and percentage) from the endowment year-by-year for the last ten years?

The table below shows the amount spent out of MIT's endowment each year for the last ten fiscal years (in both percentage and dollars).

Table 9A: Spending from the MIT Endowment			
Fiscal Year	Average Spending Percentage*	Spot Spending Percentage**	Dollars (in millions)
1998	4.8%	3.7%	$112.2
1999	5.2%	3.9%	$143.6
2000	6.3%	4.8%	$207.0
2001	5.6%	3.5%	$229.5
2002	5.6%	4.8%	$292.7
2003	5.8%	6.4%	$340.9
2004	5.7%	6.4%	$329.4
2005	5.4%	5.3%	$308.3
2006	5.5%	4.7%	$315.3
2007	5.3%	4.3%	$359.9

** The average spending percentage is calculated by dividing the amount spent out of the endowment in a given fiscal year by the average of the endowment value over the prior (trailing) three fiscal years.*

*** The spot spending percentage is calculated by dividing the amount spent out of the endowment in a given fiscal year by the endowment value at the start of that fiscal year.*

Question 9 (B) What is the targeted payout (in percentage) from the endowment year-by-year for the last ten years?

In each of the past ten years MIT has sought to spend between 4.75 - 5.5% of the three-year average endowment market value. Given the volatility of the endowment on a year to year basis, MIT has not historically set a spending target based on the one-year spot value of its endowment.

Question 9 (C) If either the actual and/or targeted payout is below 5%, please explain how this meets the needs of the current student body.

As set forth in Question 9(A), in the past ten years only once (1998) has the endowment average spending percentage fallen below 5%, as MIT has defined spending percentage for its target rate. In all subsequent years the average spending percentage has exceeded 5%, in most cases significantly. The spot spending percentage has been both less than 5%, as would be expected in periods of exceptional investment returns, and more than 5%, as would be expected in periods of investment downturns. See the Answer to Question 5(B) for an explanation as to how the MIT spending policy meets the needs of its current student body.

Question 9 (D) If there is a material variation between actual and targeted, please explain.

In each of the past ten years the actual spending from the endowment has been within or has exceeded the target spending range. On at least five occasions during this ten year period endowment spending exceeded the target spending range as MIT determined that additional amounts were needed to meet the Institute's operating needs. The periods of higher spending generally corresponded to periods when MIT invested unusually significant amounts in additional laboratories and facilities.

Question 9 (E) What were the top 10 major expenditures from the endowment last year?

The table below shows the top ten categories for MIT's spending from its endowment, for fiscal year 2006-2007.

Table 9E: Top 10 Expenditures from the Endowment in Fiscal Year 2006-2007	
Category	**Amount (dollars)**
Instructional/Professorships	$64,128,520
Undergraduate Scholarships	$37,912,415
Staff Salaries	$31,784,865
Facilities (building, utilities, rent, & taxes)	$16,222,351
Academic Department-Specific Funds	$14,390,460
Academic Department-Specific Funds Restricted for Research Purposes	$12,349,078
Academic Department-Specific Funds Restricted for Graduate Fellowships	$8,529,689
Graduate Fellowships General (Designated by Provost)	$3,745,715
General Institute Support	$3,675,940
Academic Department-Specific Funds for General Graduate Student Financial Support	$3,593,006

Question 10 (A) How much of the endowment is subject to permanent spending restrictions or limitations set by the original donor?

Use of Purpose Restriction

As of June 30, 2007, MIT maintained 2,898 endowment funds having an aggregate value of $9,980,409,707. Of these, 2,389 were subject by the original donor to permanent use restrictions as to their directed purpose. These restricted-as-to-purpose endowment funds had an aggregate value of $6,227,639,640 as of June 30, 2007.

Use of Principal Restriction

Of MIT's 2,898 endowment funds as of June 30,2007, 2,379 were subject by the original donor to permanent spending (as to use-of-principal) restrictions so that only the income on these endowments could be used in furtherance of the endowment fund's purpose. These permanently restricted-as-to-principal endowed funds had an aggregate value of $1,559,929,789 as of June 30, 2007.

Question 10 (B) Of the portion subject to permanent limitations, what percentage is restricted for need-based scholarships? What portion is restricted for undergraduate financial aid?

Of the portion of the endowment subject to permanent limitations of the donor, $1,281,628,527 or about 21% of that portion (about 13% of total endowment value) is

restricted for undergraduate financial aid. All MIT grants are need-based.

Question 10 (C) Please provide the top five types of restrictions on the endowment by category.

The table below shows the top five types of restrictions on MIT's endowment, the largest dollar amount of principal value first, as of June 30, 2007.

Table 10C: Top 5 Restrictions on Endowment As of June 30, 2007	
	Category
1.	Instructional/Professorships
2.	Undergraduate Scholarships
3.	Academic Department-Specific Funds
4.	Academic Department-Specific Funds Restricted for Research Purposes
5.	Academic Department-Specific Funds Restricted for Graduate Student Aid

Question 10 (D) Please provide the investment return to the endowment year-by-year for the last ten years.

Table 10D: Investment Return to the Endowment	
Fiscal Year	**Net Investment Return (%)**
1998	24.1%
1999	18.4%
2000	55.6%
2001	-3.7%
2002	-10.0%
2003	-0.9%
2004	18.0%
2005	17.4%
2006	23.0%
2007	22.1%

Question 10(E) What percentage of the endowment is subject to significant limitations placed on it due to a decision by the board (or a subcommittee of the board) or a college or university official - such as a set-aside for a specific program?

Of MIT's 2,898 endowment funds on June 30, 2007, 194 (about 7%) were MIT Board-restricted and set aside for particular uses to meet important current and future needs. These Board-restricted (as to purpose) endowment funds had an aggregate value of $2,037,522,705 or about 20% of the total endowment as of June 30, 2007.

Question 11 (A) Please explain the fee arrangement to investment advisors. How is the fee and compensation measured and determined?

MIT has no uniform fee arrangement with its investment fund managers. Rather, fee arrangements generally vary with each separate fund investment.

MIT's investment fund managers generally receive a fee based on the amount of investments under management. This fee also varies from one investment to the next.

In some cases MIT's investment fund managers receive an incentive allocation as their fee which is typically equal to a percentage of the particular fund's annual profits. That percentage will vary from one investment to the next. When fees are structured in this fashion MIT Investment Management ensures that its fund managers, who also have an interest in the fund, are sufficiently incented to maximize their returns. The interests of its fund managers and MIT are aligned by virtue of the fact that managers are driven to ensure the success of the fund since their earnings will depend on the performance of the fund as a whole.

It is important to note that regardless of the particular fee arrangement, MIT Investment Management staff reviews and evaluates all of its investment fund managers on a net (of fee) basis.

Question 11 (B) What is the process to review reasonableness of the fee and compensation and what comparables are used? Who reviews and approves the fee?

The MIT Investment Management staff engages in extensive research, due diligence and negotiation in connection with each endowment investment. As part of this process, the proposed fee arrangement is reviewed and evaluated based on the historical and anticipated performance of the manager, as well as the asset class and unique nature of the investment. If, given all of the surrounding circumstances, the proposed fee arrangement is considered inappropriate, then either an attempt will be made to modify the fee structure or the investment will no longer be pursued.

A detailed report describing the investment, and highlighting key factors including the fund's proposed fee structure, is presented to the MIT Investment Management Board on a quarterly basis. The MIT Investment Management Board reviews every endowment fund investment including the fee arrangement with the fund manager, and shares its views with MIT Investment Management staff.

Question 11 (C) Who pays the fee (the endowment, general funds)?

Investment fees are paid out of the endowment and not out of MIT's general funds.

Question 11 (D) Please explain what relationship, if any, exists between

endowment size and/or growth and the compensation given to the college or university president and the endowment manager. Please list what endowment-related bonuses, if any, either the college or university president or the investment manager has received year-by-year for the last ten years.

There is no relationship between endowment size and/or growth and the compensation paid to the MIT president. The MIT president does not receive any endowment-related bonus.

A portion of the compensation paid to the head of MIT Investment Management (and before him, the MIT Treasurer) is incentive based. The amount of incentive compensation is based primarily on the investment performance of the endowment in relation to market benchmarks and peer university endowment performance.

Table 11D: Endowment Related Bonus Received by Head of MIT Investment Management*

Academic Year	Amount
1998	$ 70,547
1999	$ 73,507
2000	$ 76,960
2001	$ 90,563
2002	$126,656
2003	$153,761
2004	$ 93,410
2005	$ 70,870
2006	$ 187,131
2007	$535,291**

** Prior to the creation of MIT Investment Management in 2003, the MIT Treasurer managed the MIT endowment.*

*** Of this amount, $515,291 represented the accelerated endowment bonus paid to the outgoing MIT Investment Management President who had retired. Under the bonus program the incentive bonus, which is otherwise paid-out and further adjusted over a three-year period, is accelerated.*