
# Report of the Treasurer

for the year ended
June 30, 2015

Massachusetts
Institute of
Technology

# Report of the Treasurer

for the year ended June 30, 2015

Massachusetts
Institute of
Technology

# The Corporation
## 2014–2015

as of June 30, 2015

Chairman: John S. Reed – completed service as ex officio member effective October 10, 2014
Chairman: Robert B. Millard* – effective October 11, 2014
President: L. Rafael Reif*
Executive Vice President and Treasurer: Israel Ruiz*
Vice President and Secretary: Kirk D. Kolenbrander – completed service as ex officio member effective March 6, 2015
Senior Vice President and Secretary of the Corporation: R. Gregory Morgan effective March 6, 2015

### Life Members

Shirley A. Jackson; James A. Champy*; Denis A. Bovin*; A. Neil Pappalardo*; Judy C. Lewent; Kenan E. Sahin; Edie N. Goldenberg; John K. Castle; Susan E. Whitehead*; Brian G.R. Hughes; L. Robert Johnson; Arthur J. Samberg*; Gururaj Deshpande; Barrie R. Zesiger*; John A. Thain*; Susan Hockfield; Lawrence K. Fish*; Diane B. Greene; Charlene C. Kabcenell; Henri A. Termeer*; Barry Lam; Mohammed Jameel.

### Members

Theresa M. Stone; John W. Jarve; Mark P. Gorenberg; Marjorie M.T. Yang; Mark R. Epstein; Alan G. Spoon; David D. Ho; Martin Y. Tang; Anita K. Jones; Kenneth Wang; R. Erich Caulfield; Chiquita V. White; Megan J. Smith; Abigail P. Johnson; Diana C. Walsh*; Victor J. Menezes; Ursula M. Burns; Rafael del Pino; K. Anne Street; Reginald Van Lee; Sarah Stewart Johnson; Leonard H. Schrank; R. Gregory Turner; Eve J. Higginbotham; Alia Whitney-Johnson; Phillip T. Ragon; Paul R. Marcus; Philip C.T. Ng; Arunas A. Chesonis; Fariborz Maseeh; Tanguy Chau; Bruce N. Anderson; Patricia R. Callahan; Neil E. Rasmussen; Carmen M. Thain; David L. desJardins; Vanu G. Bose; Paul M. Kominers; Alan M. Leventhal; Viktor F. Vekselberg; Ilene S. Gordon; Eran Broshy; Ronald A. Williams; Alan M. Dachs; Samantha O'Keefe.

### President of the Association of Alumni and Alumnae

Donald E. Shobrys

### Representatives of the Commonwealth

Governor: Deval L. Patrick – completed service as ex officio member effective January 8, 2015
Governor: Charles D. Baker, Jr. – ex officio member effective January 8, 2015
Chief Justice of the Supreme Judicial Court: Roderick L. Ireland – completed service as ex officio member effective July 25, 2014
Chief Justice of the Supreme Judicial Court: Ralph D. Gants – ex officio member effective July 26, 2014
Secretary of Education: Matthew H. Malone – completed service as ex officio member effective January 8, 2015
Secretary of Education: James A. Peyser – ex officio member effective January 8, 2015

### Life Members Emeriti and Emeritae

Irénée duPont, Jr.; D. Reid Weedon, Jr.; Colby H. Chandler; Carl M. Mueller; Louis W. Cabot; Christian J. Matthew; Paul M. Cook; William S. Edgerly; Frank Press; Edward E. David, Jr.; Emily V. Wade; George N. Hatsopoulos; Mary Frances Wagley; Michael M. Koerner; Morris Tanenbaum; Breene M. Kerr; W. Gerald Austen; Richard P. Simmons; Morris Chang; Paul E. Gray; Alexander W. Dreyfoos, Jr.; Ronald A. Kurtz; DuWayne J. Peterson, Jr.; Raymond S. Stata; Brit J. d'Arbeloff; Gordon M. Binder; Dana G. Mead; Arthur Gelb; Norman E. Gaut; Robert A. Muh; James H. Simons; Samuel W. Bodman III; David H. Koch; Robert M. Metcalfe.

Members' names are listed in chronological order of election to each category.

**Member of the Executive Committee.*

# Table of Contents

# Report of the Treasurer

## To Members of the Corporation

During fiscal 2015, strong investment and operating performance enabled MIT to continue to advance discovery and innovation to address some of the world's great challenges, and to extend its educational impact beyond the boundaries of our campus. MIT's pooled investment return of 13.2 percent and net operating results of $179.7 million contributed to an increase of 8.7 percent in net assets totaling $17,739.0 million. The financial position achieved over the last few years provides MIT with options in responding to continued economic pressures and volatility in global financial markets while continuing to invest in the Institute's priorities to enable the work of MIT's faculty, students, and staff.

The Institute has continued to advance plans to revitalize Kendall Square and the east campus, with planning for the initial buildings now in the design phase. In July 2015, MIT filed project review and planned unit development special permit applications with the Cambridge Planning Board, which is a key step forward in realizing an exciting future for Kendall Square. Plans for initial development incorporate housing and childcare, connected open spaces, innovation space, retail and commercial space, and a new location for the MIT Museum. In addition, the Institute remains very interested in exploring future opportunities that will allow MIT to further shape the innovation ecosystem around Kendall Square.

MIT has also initiated a formal planning process for the west and northwest areas of campus. The intent of the current study is to create a long-range development framework to accommodate future academic and residential uses of the MIT campus west of Massachusetts Avenue to complement east campus design efforts and the ongoing renewal of the main campus. Provision of additional graduate student housing and renewal of undergraduate housing are critical elements of the campus plan.

Fiscal 2015 was the first year in recent decades during which we prevented the growth of the deferred maintenance backlog. While recognizing this important milestone, we are cognizant that addressing deferred maintenance remains an integral part of overall campus renewal. Recent strong financial results, as depicted in the Summary of Key Financial Highlights table below, have enabled us to make significant progress in our renewal plans. The proceeds from bonds, together with our fundraising efforts, will enable us to further advance MIT's multiyear campus renewal program and prepare for MIT's future of continued innovation, discovery, and knowledge.

This year, MIT released a number of key reports and announced important initiatives in research and education. The MIT Innovation Initiative, led by Associate Deans for Innovation Vladimir Bulović and Fiona Murray, released its preliminary report in December 2014. Entitled "The MIT Innovation Initiative: Sustaining and Extending a Legacy of Innovation," the report detailed a series of steps for accelerating innovation at MIT. Then in April 2015, the MIT Committee to Evaluate the Innovation Deficit, chaired by Professor Marc Kastner, released a report titled "The Future Postponed" detailing the impact of declining federal investment in basic research.

In June 2015, the MIT Climate Change Conversation Committee, chaired by Professor Roman Stocker, issued recommendations on how MIT can contribute to solving the climate challenge through education, research, and campus engagement, and to moving forward national and global agendas. The report includes a number of possibilities for transforming the campus into a living laboratory for studying climate change, and forming new partnerships to accelerate solutions to the climate challenge. This triggered substantial commentary from the MIT community. In addition, the MIT Online Policy Initiative, led by Professor Karen Willcox and Dean of Digital Learning Sanjay Sarma, was created in August 2014 to build on the work of the Institute-wide Task Force on the Future of MIT Education, and to catalyze a national conversation about the future of education and online learning.

The following are additional details regarding MIT's fiscal 2015 financial statements: Statements of Financial Position, Statement of Activities, and Statements of Cash Flows.

**Summary of Key Financial Highlights (10-year trend)**

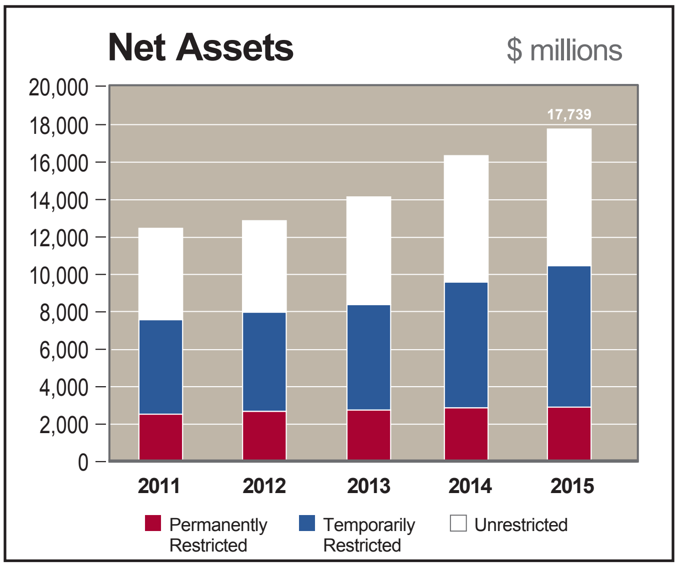
| *(in millions of dollars)* | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|---|---|
| Operating Revenues | 2,141 | 2,180 | 2,408 | 2,644 | 2,663 | 2,751 | 2,990 | 3,187 | 3,124 | 3,291 |
| Operating Expenses | 2,182 | 2,208 | 2,294 | 2,461 | 2,383 | 2,571 | 2,744 | 2,909 | 2,919 | 3,111 |
| Operating Results | (41) | (28) | 114 | 183 | 280 | 180 | 246 | 278 | 206 | 180 |
| Net Assets | 10,060 | 12,695 | 12,770 | 9,946 | 10,324 | 12,388 | 12,799 | 14,133 | 16,315 | 17,739 |
| Endowment | 8,368 | 9,943 | 9,948 | 7,880 | 8,317 | 9,713 | 10,150 | 10,858 | 12,425 | 13,475 |
| Borrowings | 1,278 | 1,078 | 1,335 | 1,736 | 1,729 | 2,468 | 2,460 | 2,428 | 2,919 | 2,922 |

## Statements of Financial Position

The discussion in this section highlights key elements of MIT's financial position—net assets; investments; endowment; land, buildings, and equipment; postretirement benefit assets and liabilities; and borrowings.

### Net Assets

Total net assets increased to $17,739.0 million, an increase of 8.7 percent from fiscal 2014, establishing the Institute's highest-ever level of net worth. Net assets are presented in three distinct categories to recognize the significant ways in which universities are different from profit-making organizations. These categories reflect the nature of the restrictions placed on gifts by donors.




In fiscal 2015, permanently restricted net assets increased $39.6 million, or 1.4 percent, to $2,881.9 million, primarily due to new gifts and pledges made and income reinvested to permanently restricted endowment funds. Temporarily restricted net assets increased $835.2 million, or 12.4 percent, to $7,553.4 million, primarily due to an increase in the market value of assets held in permanently restricted funds. The Commonwealth of Massachusetts requires that all universities located within the Commonwealth report accumulated market gains on both permanently and temporarily restricted net assets as temporarily restricted net assets until appropriated for use.

Unrestricted net assets increased $548.7 million, or 8.1 percent, to $7,303.7 million, primarily due to unrestricted investment gains.

### Investments

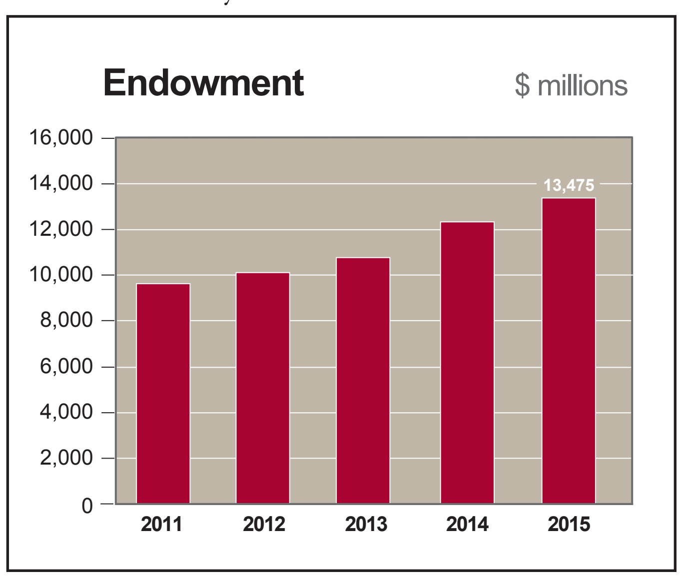
Investments at fair value were $17,533.8 million as of fiscal year end 2015, an increase of $1,305.0 million, or 8.0 percent, from $16,228.8 million as of the previous fiscal year end. In fiscal 2013, MIT began a program to finance certain real estate investments to optimize the use of invested capital in support of the Institute's mission. The outstanding liability balance associated with this program totaled $220.4 million in fiscal 2015 and $231.2 million in fiscal 2014.

The financial statements include both realized and unrealized gains and losses on investments and other assets. These amounts totaled a net gain of $1,651.6 million in fiscal 2015, and $2,152.9 million in fiscal 2014.

MIT's investment policy is based on the primary goal of generating high real rates of return without exceptional volatility. To reduce volatility, the portfolio is broadly diversified. To generate high real rates of return, MIT's investment policy favors equity investments over fixed income instruments, and is heavily weighted toward less efficient markets such as private equity, real estate, and real assets. MIT primarily invests through external fund managers, thereby allowing MIT to access the best investment talent 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. Decision authority for the selection of managers, direct investments, and asset allocation resides with MIT's Investment Management Company (MITIMCo). The Board of Directors of MITIMCo holds four regularly scheduled meetings during the fiscal year where investment policy, performance, and asset allocation are reviewed.

### Endowment

Endowment assets, the largest component of total investments, are managed to maximize total investment return relative to appropriate risk. The market value of investments in endowment funds, excluding pledges for endowed purposes, totaled $13,474.7 million as of fiscal year end 2015, an increase of 8.4 percent over the $12,425.1 million level of last year.



This year, MIT's pooled investments (Pool A) produced a return of 13.2 percent. Investment income and a portion of gains are distributed for spending in a manner that preserves the long-term purchasing power of the endowment. Endowment funds invested in Pool A, MIT's primary investment pool, receive distributions based on relative ownership, which is valued monthly.

## Land, Buildings, and Equipment

Land, buildings, and equipment had a net book value of $2,822.3 million as of fiscal year end 2015, an increase of $198.0 million, or 7.5 percent, from $2,624.3 million the previous year, mainly driven by expenditures for research and educational facilities.

During fiscal 2015, new construction and major renovation projects placed into service totaled $104.9 million. The Department of Materials Science and Engineering (DMSE) celebrated the opening of the renovated W. David Kingery Ceramics and Glass Laboratory — formerly known as the MIT Glass Lab — and the Merton C. Flemings Materials Processing Laboratory, home to MIT's forge and foundry. The third level of Building E25 was renovated to provide expanded laboratory and office space for the Institute for Medical Engineering and Science (IMES), and the first phase of the Building 2 renovation was completed.

The Institute currently has a total of 169 capital projects under construction with a cumulative cost of $278.1 million. Building E52, home to the Department of Economics and administrative offices for the MIT Sloan School of Management, is undergoing a complete renovation that includes an expanded conference center, exterior wall restoration, and new windows. Building 2, home to the Department of Mathematics and portions of Chemistry, is being fully renovated, and programmatic space is being increased with the addition of a partial top floor. Building 66 is undergoing a multi-phased renovation for the Department of Chemical Engineering to improve nearly 50 percent of the space and provide upgrades to building infrastructure. Additionally, site preparation is ongoing for MIT.nano, a five-story 200,000 gross square foot facility that will combine the Institute's nanotechnology, materials, and engineering systems research with the most advanced fabrication tools and materials processing capabilities.

In accordance with MIT 2030, a flexible framework that guides and supports the Institute's ongoing physical and financial stewardship, MIT expects future pressure on operating results due to increasing depreciation costs associated with the above and anticipated capital projects that actively address current and future academic needs and opportunities.

Also, during fiscal 2015, two real estate properties, NW22 (land only) and NW23 (land and building) located on Albany Street, formerly included in the real estate investment portfolio, were transferred to educational plant for academic and administrative use. Building NW23 is currently undergoing major renovations and will be the new home to the Department of Facilities groups of Campus Services, Campus Construction, Maintenance and Utilities, and the Office of Campus Planning. This will include the installation of a new roof, new windows, and open office space with a few private offices and conference rooms.

## Postretirement Benefit Assets and Liabilities

The defined benefit pension plan had assets of $3,378.5 million as of fiscal year end 2015, an increase of $242.7 million from $3,135.8 million as of fiscal year end 2014. The plan's projected liabilities were $3,431.7 million as of fiscal year end 2015, up $291.0 million from $3,140.7 million a year earlier, resulting in a net pension liability of $53.2 million and $4.9 million as of fiscal year end 2015 and 2014, respectively. MIT also maintains a postretirement welfare benefit plan that covers retiree expenses associated with medical and life insurance benefits. This plan had assets of $548.9 million and liabilities of $549.0 million as of fiscal year end 2015, resulting in a net benefits liability of $0.1 million compared to $43.9 million as of fiscal year end 2014. For both plans, the increases in assets and liabilities were primarily due to investment performance and a change in mortality assumptions, respectively.

Effective as of fiscal year end 2015, MIT revised its mortality assumptions used to determine the projected benefit obligations of the defined benefit pension and postretirement welfare benefit plans. The revised assumptions were derived from the mortality tables published by the Society of Actuaries in October 2014. The change in mortality assumptions for both plans resulted in an increase of $267.9 million in the projected benefit obligations as of fiscal year end 2015. In addition to this change, MIT engaged its actuary to perform a comprehensive review and experience study of certain demographic assumptions for both plans that resulted in a decrease of $33.9 million in the projected benefit obligations as of fiscal year end 2015.

The combined plans' fiscal 2015 underfunded status was $53.2 million, up from $48.8 million as of fiscal year end 2014. On an accounting basis in fiscal 2014, the defined benefit pension plan had a funding level of 99.8 percent, and the postretirement welfare benefit plan had a funding level of 91.9 percent. In accordance with the Institute's funding strategy to ensure the long-term strength of these plans, the Institute contributed $7.5 million to the defined benefit pension plan and $28.7 million to the postretirement welfare benefit plan during fiscal 2015. As a result of these contributions, changes in the interest rate environment, actual investment performance, and changes in certain demographic assumptions, the funding status of the defined benefit pension plan slightly declined to 98.5 percent, and the postretirement welfare benefit plan improved to 99.9 percent. The investments of both plans' assets are managed by MITIMCo.

MIT also offers a 401(k) plan to its employees, which is not reflected in the Statements of Financial Position. Assets in this plan are invested at the direction of participants in a broad array of investment funds. The plan's investment market value was $3,893.5 million as of fiscal year end 2015. In July 2015, MIT transitioned to a new, streamlined 401(k) investment menu, which includes a core line-up of 37 funds plus the option to access more than 5,000 additional funds through Fidelity's retail brokerage window.

## Borrowings

On September 29, 2014, MIT issued $522.4 million in taxable Series D bonds to advance refund and defease $453.7 million of Series N (2008) and Series O (2008) tax-exempt bonds. The $522.4 million Series D bond proceeds were used to purchase Treasury securities to fund escrow accounts that will cover both interest payments and principal repayments on the original bonds through their redemption dates (July 1, 2017 for Series N; July 1, 2018 for Series O) plus the costs of issuance. Low yields in the Treasury market relative to the interest rates paid by MIT on the Series N and O bonds necessitated the total Series D principal to exceed that of the defeased debt, with this transaction increasing the total principal of indebtedness by $68.7 million. However, the lower interest rates on the Series D bonds relative to those of the defeased debt will result in overall lower debt service payments to maturity.

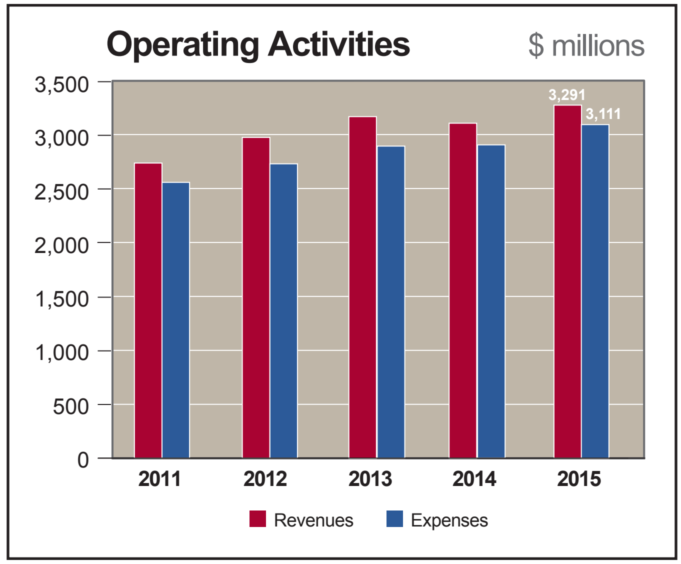
MIT's financial strength is reviewed periodically by both Moody's Investors Service and Standard & Poor's Rating Services. In fiscal 2015, these agencies rated the most recent bond issuance and reaffirmed MIT's credit as "Aaa" and "AAA," their highest rating levels.

## Statement of Activities

## Operating Activities

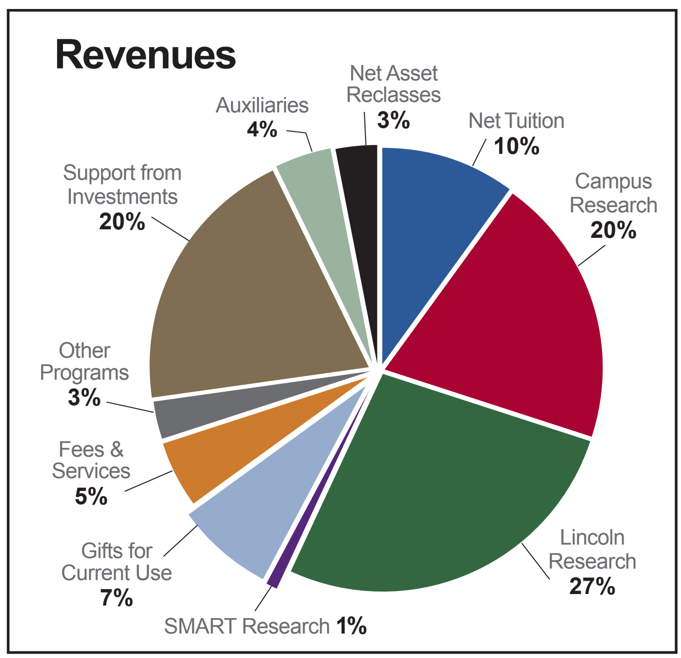
In fiscal 2015, MIT recovered from the prior year's reduction in research volume and continued to grow research activity and maintain excellence in education. The Institute invested in education and research activities, as well as in its capital renewal and maintenance program. MIT ended the year with a surplus from operations of $179.7 million. This is $26.2 million, or 12.7 percent, lower than the fiscal 2014 result.

Operating revenues increased $166.4 million, or 5.3 percent, to $3,290.8 million in fiscal 2015, while operating expenses increased $192.6 million, or 6.6 percent, to a total of $3,111.1 million. Year-over-year comparisons of the components of operating results are presented on the following graph.




## Operating Revenues

MIT's operating revenues include tuition, research, unrestricted gifts and bequests for current use, fees and services, other programs, endowment distribution, and income from other investments, auxiliaries, and payments on pledges for unrestricted purposes (included within net asset reclassifications and transfers).




Tuition revenue for graduate, undergraduate, and non-degree executive programs net of financial aid grew by $7.3 million, or 2.3 percent, to $331.8 million. The growth in undergraduate tuition revenue was driven by a 3.5 percent increase in tuition rates and a 0.4 percent decrease in student population. Financial aid for undergraduate students increased by 4.4 percent to $92.5 million. Financial aid for graduate students grew by 2.8 percent to $187.8 million.

Research revenues for on-campus departments, labs, and centers at MIT increased $2.1 million, or 0.3 percent, to $665.6 million. Research revenues for Lincoln Laboratory increased $50.7 million, or 6.1 percent, to $879.3 million; and for the Singapore-MIT Alliance for Research and Technology (SMART), research revenues increased $0.1 million, or 0.4 percent, to $31.7 million.

The growth rate in MIT's campus research is being driven by both Federal and non-Federal sponsors. Federally sponsored research revenue slightly increased by 1.1 percent compared to the prior fiscal year, with the largest increase being related to the National Aeronautics and Space Administration. Non-Federally sponsored research increased by 5.8 percent, primarily driven by nonprofits and industrial sponsors. The increase in Lincoln Laboratory research is the result of increased Federal funding from the Department of Defense. During fiscal 2015, the Air Force renewed the contract for operation of Lincoln Laboratory for an initial term of five years with an option to extend for an additional five years, acknowledging the long-term value of the Laboratory in service to national security. The moderate increase in SMART research is the net result of certain interdisciplinary research groups winding down and renewing.

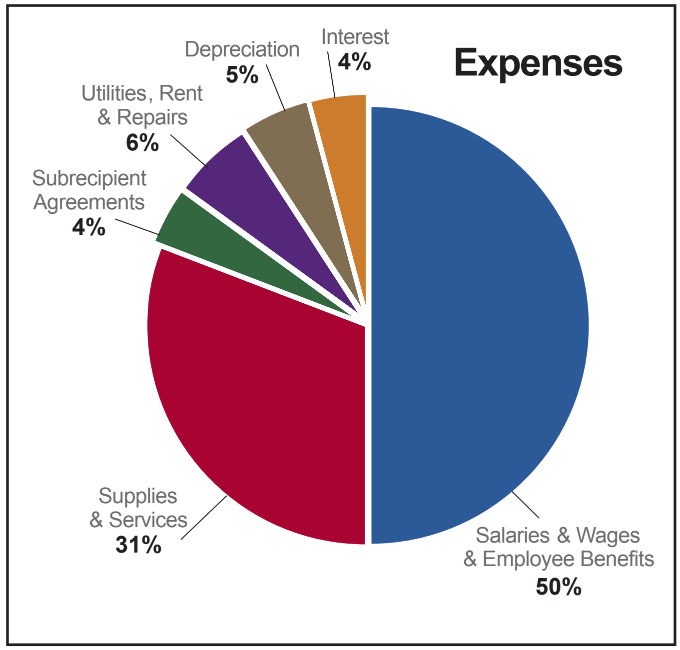
MIT's modified total direct research expenditures, which form the basis for recovery of indirect costs, increased by $57.5 million, or 6.1 percent, in fiscal 2015.

While research and net tuition support more than half of MIT's revenue, the Institute experienced significant growth in support from investments. Support from investments increased $46.0 million, or 7.4 percent, primarily due to an increase in the endowment distribution. The effective spending rate on endowed funds was 4.5 percent, or 5.1 percent on a three-year-average basis, in fiscal 2015.

## Operating Expenses

Operating expenses grew to $3,111.1 million, an increase of $192.6 million, or 6.6 percent. This consolidated result combines differing underlying trends in units funded by the general Institute unrestricted budget, the research enterprise, and expenditures from accumulated unit fund balances.

Overall Institute salary expenses rose 5.9 percent while employee benefits expenses rose 7.4 percent, primarily driven by increases in costs associated with the actuarial adjustments made to the postretirement benefit plans and employment taxes related to Social Security (FICA and Medicare). One-time professional costs associated with streamlining the 401(k) plan investment menu also contributed to the increase. Medical and dental insurance costs remained stable on a per-member basis, but grew slightly to accommodate increased membership. Campus average salary increases were 4.5 percent while headcount grew by 1.8 percent.




## Non-Operating Revenues, Gains and Losses Summary

Non-operating activities contributed $1,299.3 million to MIT's fiscal 2015 total net assets of $17,739.0 million. Net appreciation on investments and other assets (reduced by the endowment spending distribution), gifts and bequests, pledges, and changes in retirement plan obligations and assets were the principal contributors to the net positive non-operating performance. Net appreciation on investments and other assets, reduced by the endowment spending distribution, totaled $1,134.8 million.

## Gifts and Pledges

Gifts to MIT support scholarships, fellowships, professorships, research, educational programming, and student life activities, as well as construction and renovation of buildings. Gifts and pledges for fiscal 2015 totaled $493.7 million, an increase of 9.1 percent from the fiscal 2014 total of $452.7 million. Gifts from individuals represented 35.3 percent of new gifts and pledges in fiscal 2015, down from 64.3 percent in fiscal 2014. Gifts from foundations represented 26.3 percent of new gifts and pledges in fiscal 2015, up from 23.4 percent in fiscal 2014. Gifts from corporations and other sources represented 38.4 percent of new gifts and pledges in fiscal 2015, up from 12.3 percent in fiscal 2014. New gifts and pledges for research and education were the largest categories of contributions for fiscal 2015.

## Statements of Cash Flows

The overall cash position of MIT reflects positive operating results and an active cash management strategy that takes into account liquidity management, economic conditions, and future needs.

Net operating cash flow consumed $71.4 million in fiscal 2015. Net operating cash flow resulted from a total increase in net assets, adjusted for non-cash items (depreciation and net gain on investments and other assets, etc.), offset by changes in working capital, excluding cash and debt. The net of pledges receivable, accounts receivable, accounts payable, and other operating assets and liabilities provided $43.6 million of operating cash flow in fiscal 2015. Net investing activities provided $61.1 million in cash due to proceeds from sales of investments to cover the Institute's endowment spending policy, offset by spending on capital projects and purchases of investments, in fiscal 2015. Cash provided by financing activities was $30.3 million in fiscal 2015, $584.6 million lower than in fiscal 2014, as fiscal 2014 included a century bond issuance of $550.0 million.

MIT's full financial statements and footnotes, further describing our financial position, activities, and cash flows through June 30, 2015, are included on the following pages.

## Closing Remarks

The Institute's strong financial performance in fiscal 2015 follows years of solid operating growth, and we begin fiscal 2016 on a sound financial foundation with the resources needed to enable MIT's future.

On April 29, 2015, MIT unveiled the memorial to MIT Police Officer Badge #179 Sean Collier. Intended to be a place of remembrance and reflection, Professor J. Meejin Yoon's design, made possible by Professor John Ochsendorf's engineering, in a shape akin to an open hand reflects the connectedness of our community, and epitomizes the highest expression of our MIT motto '*Mens et Manus*' — mind and hand. While we will always remember, we move forward as a stronger community, hopeful about our future.

I have the greatest enthusiasm about how the campus will be physically transformed in the coming decade, about the innovation and discoveries our faculty and students will achieve, and about the impact MIT will continue to have in addressing the world's great challenges. We approach the future with tremendous optimism about all we hope to accomplish together, but still mindful of the world's financial uncertainties. While our financial strength provides MIT with flexibility to pursue groundbreaking initiatives and build for the future, we remain vigilant to economic and financial forces beyond our direct control and will be responsive to global events to maintain our capability to support MIT's core mission.

In closing, I would like to express my deep appreciation to Dr. Kirk D. Kolenbrander, and acknowledge his many contributions as Secretary of the MIT Corporation since 2006. I am also grateful to Senior Vice President and Secretary of the Corporation R. Gregory Morgan for accepting these responsibilities in March 2015.

As always, I remain indebted to our students, faculty, staff, alumni, friends, and members of the MIT Corporation, for their dedication and enduring commitment to realizing the future we aspire to together.

Respectfully submitted,

Israel Ruiz
Executive Vice President and Treasurer
September 11, 2015

# Massachusetts Institute of Technology

## Statements of Financial Position

at June 30, 2015 and 2014

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| **Assets** | | |
| Cash | $ 317,682 | $ 297,759 |
| Accounts receivable, net | 172,522 | 195,544 |
| Pledges receivable, net, at fair value | 558,095 | 490,336 |
| Contracts in progress, principally US Government | 66,440 | 65,326 |
| Deferred charges, inventories, and other assets | 153,947 | 120,811 |
| Student notes receivable, net | 45,678 | 48,169 |
| Investments, at fair value | 17,533,764 | 16,228,756 |
| Noncontrolling interests | 232,415 | 287,825 |
| Land, buildings, and equipment (at cost of $4,186,490 for June 2015; $3,881,205 for June 2014), net of accumulated depreciation | 2,822,312 | 2,624,271 |
| **Total assets** | **$ 21,902,855** | **$ 20,358,797** |
| **Liabilities and Net Assets** | | |
| **Liabilities:** | | |
| Accounts payable, accruals, and other liabilities | 436,288 | 411,959 |
| Liabilities due under life income fund agreements, at fair value | 141,946 | 103,076 |
| Deferred revenue and other credits | 151,933 | 133,288 |
| Advance payments | 422,675 | 392,214 |
| Borrowings | 2,922,231 | 2,918,901 |
| Government advances for student loans | 35,561 | 35,037 |
| Accrued benefit liabilities | 53,233 | 48,830 |
| **Total liabilities** | **4,163,867** | **4,043,305** |
| **Net Assets:** | | |
| Unrestricted net assets controlled by the Institute | 7,071,258 | 6,467,131 |
| Unrestricted net assets attributable to noncontrolling interests | 232,415 | 287,825 |
| Total unrestricted net assets | 7,303,673 | 6,754,956 |
| Temporarily restricted | 7,553,447 | 6,718,225 |
| Permanently restricted | 2,881,868 | 2,842,311 |
| **Total net assets** | **17,738,988** | **16,315,492** |
| **Total liabilities and net assets** | **$ 21,902,855** | **$ 20,358,797** |

*The accompanying notes are an integral part of the financial statements.*

# Massachusetts Institute of Technology

## Statement of Activities

for the year ended June 30, 2015

(with summarized financial information for the year ended June 30, 2014)

| *(in thousands of dollars)* | 2015 Unrestricted | 2015 Temporarily Restricted | 2015 Permanently Restricted | Total 2015 | Total 2014 |
|---|---|---|---|---|---|
| **Operating Activities** | | | | | |
| **Operating Revenues** | | | | | |
| Tuition and similar revenues, net of discount of $280,282 in 2015 and $271,299 in 2014 | $ 331,819 | $ - | $ - | $ 331,819 | $ 324,502 |
| Research revenues: | | | | | |
| Campus | 665,583 | - | - | 665,583 | 663,518 |
| Lincoln | 879,327 | - | - | 879,327 | 828,659 |
| SMART | 31,737 | - | - | 31,737 | 31,617 |
| Total research revenues | 1,576,647 | - | - | 1,576,647 | 1,523,794 |
| Gifts and bequests for current use | 221,820 | - | - | 221,820 | 162,091 |
| Fees and services | 160,962 | - | - | 160,962 | 176,341 |
| Other programs | 101,293 | - | - | 101,293 | 122,582 |
| Support from investments: | | | | | |
| Endowment | 545,861 | - | - | 545,861 | 515,431 |
| Other investments | 125,498 | - | - | 125,498 | 109,925 |
| Total support from investments | 671,359 | - | - | 671,359 | 625,356 |
| Auxiliary enterprises | 120,946 | - | - | 120,946 | 120,101 |
| Net asset reclassifications and transfers | 105,923 | - | - | 105,923 | 69,556 |
| Total operating revenues | $ 3,290,769 | $ - | $ - | $ 3,290,769 | $ 3,124,323 |
| **Operating Expenses** | | | | | |
| Salaries and wages | $ 1,253,353 | $ - | $ - | $ 1,253,353 | $ 1,183,270 |
| Employee benefits | 309,195 | - | - | 309,195 | 287,976 |
| Supplies and services | 971,239 | - | - | 971,239 | 892,493 |
| Subrecipient agreements | 140,417 | - | - | 140,417 | 124,074 |
| Utilities, rent, and repairs | 171,744 | - | - | 171,744 | 182,271 |
| Depreciation | 146,239 | - | - | 146,239 | 137,638 |
| Interest expense | 118,932 | - | - | 118,932 | 110,795 |
| Total operating expenses | 3,111,119 | - | - | 3,111,119 | 2,918,517 |
| Results of operations | $ 179,650 | $ - | $ - | $ 179,650 | $ 205,806 |
| **Non-Operating Activities** | | | | | |
| Pledge revenue | $ - | $ 132,249 | $ 62,956 | $ 195,205 | $ 180,119 |
| Gifts and bequests | - | - | 76,665 | 76,665 | 110,445 |
| Investment income | - | 1,480 | 2,905 | 4,385 | 9,098 |
| Net gain on investments and other assets | 720,195 | 1,032,292 | (100,887) | 1,651,600 | 2,152,933 |
| Distribution of accumulated investment gains | (192,145) | (324,648) | - | (516,793) | (497,888) |
| Net change in life income funds | (726) | (5,287) | (13,184) | (19,197) | 24,101 |
| Postretirement plan changes other than net periodic benefit cost | 13,314 | - | - | 13,314 | 54,398 |
| Net asset reclassifications and transfers | (116,161) | (864) | 11,102 | (105,923) | (69,556) |
| Total non-operating activities | 424,477 | 835,222 | 39,557 | 1,299,256 | 1,963,650 |
| Increase in net assets controlled by the Institute | 604,127 | 835,222 | 39,557 | 1,478,906 | 2,169,456 |
| Change in net assets attributable to noncontrolling interests | (55,410) | - | - | (55,410) | 13,162 |
| Net assets at the beginning of the year | 6,754,956 | 6,718,225 | 2,842,311 | 16,315,492 | 14,132,874 |
| **Net assets at the end of the year** | **$ 7,303,673** | **$ 7,553,447** | **$ 2,881,868** | **$ 17,738,988** | **$ 16,315,492** |

*The accompanying notes are an integral part of the financial statements.*

# Massachusetts Institute of Technology
## Statements of Cash Flows
for the years ended June 30, 2015 and 2014

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| **Cash Flow from Operating Activities** | | |
| Increase in net assets | $ 1,423,496 | $ 2,182,618 |
| Adjustments to reconcile change in net assets to net cash used in operating activities: | | |
| Net gain on investments and other assets | (1,651,600) | (2,152,933) |
| Change in accrued benefits liabilities | 4,403 | (60,814) |
| Depreciation | 146,239 | 137,638 |
| Donated securities received. | (47,153) | (42,890) |
| Proceeds from sale of donated securities | 34,226 | 18,894 |
| Net gain on life income funds | (9,844) | (32,275) |
| Change in noncontrolling interests. | 55,410 | (13,162) |
| Amortization of bond premiums and discounts and other adjustments | (2,101) | (4,383) |
| Change in operating assets and liabilities: | | |
| Pledges receivable | (67,759) | (85,742) |
| Accounts receivable | 23,022 | (26,612) |
| Contracts in progress | (1,114) | 2,673 |
| Deferred charges, inventories, and other assets | (9,459) | (12,920) |
| Accounts payable, accruals, and other liabilities, excluding building and equipment accruals | 10,981 | 25,365 |
| Liabilities due under life income fund agreements | 38,870 | 7,817 |
| Deferred revenue and other credits | 18,645 | (4,729) |
| Advance payments | 30,461 | (4,617) |
| Reclassify investment income | (4,385) | (9,098) |
| Reclassify contributions restricted for long-term investment | (63,738) | (86,449) |
| Net cash used in operating activities | (71,400) | (161,619) |
| **Cash Flow from Investing Activities** | | |
| Purchase of land, buildings, and equipment | (332,275) | (243,118) |
| Purchases of investments | (23,018,625) | (34,457,642) |
| Proceeds from sale of investments | 23,409,764 | 34,244,206 |
| Student notes issued | (19,024) | (26,599) |
| Collections from student notes | 21,224 | 27,801 |
| Net cash provided by (used in) investing activities | 61,064 | (455,352) |
| **Cash Flow from Financing Activities** | | |
| Contributions restricted for investment in endowment | 63,738 | 86,449 |
| Proceeds from sale of donated securities restricted for endowment | 12,928 | 23,996 |
| Increase in investment income for restricted purposes | 4,385 | 9,098 |
| Proceeds from borrowings | 518,500 | 550,000 |
| Repayment of borrowings | (569,816) | (55,200) |
| Increase in government advances for student loans | 524 | 474 |
| Net cash provided by financing activities | 30,259 | 614,817 |
| Net increase (decrease) in cash | 19,923 | (2,154) |
| Cash at the beginning of the year | 297,759 | 299,913 |
| **Cash at the end of the year** | **$ 317,682** | **$ 297,759** |

*The accompanying notes are an integral part of the financial statements.*

# Notes to Financial Statements

## A. Accounting Policies

### Basis of Presentation

The accompanying financial statements have been prepared in accordance with generally accepted accounting principles (GAAP) in the United States of America. The financial statements include MIT and its wholly owned subsidiaries.

Net assets, revenues, expenses, gains and losses are classified into three categories based on the existence or absence of donor-imposed restrictions. The categories are permanently restricted, temporarily restricted, and unrestricted net assets. Unconditional promises to give (pledges) are recorded as receivables and revenues within the appropriate net asset category.

Permanently restricted net assets include gifts, pledges, trusts and remainder interests, and income and gains that are required by donors to be permanently retained. Pledges, trusts, and remainder interests are reported at their estimated fair values.

Temporarily restricted net assets include gifts, pledges, trusts and remainder interests, and income and gains that can be expended but for which restrictions have not yet been met. Such restrictions include purpose restrictions where donors have specified the purpose for which the net assets are to be spent, or time restrictions imposed by donors or implied by the nature of the gift (capital projects, pledges to be paid in the future, life income funds), or by interpretations of law (net gains on permanently restricted gifts that have not been appropriated for spending). Gifts specified for the acquisition or construction of long-lived assets are reported as temporarily restricted net assets until the monies are expended and the buildings are put into use, at which point they are reclassified to unrestricted net assets. Net unrealized losses on permanently restricted endowment funds for which the book value exceeds market value are recorded as a reduction to unrestricted net assets.

Unrestricted net assets are all the remaining net assets of MIT. Donor-restricted gifts and unexpended restricted endowment income that are received and either spent, or the restriction is otherwise met within the same year, are reported as unrestricted revenue. Gifts of long-lived assets are reported as unrestricted revenue.

Net asset reclassifications and transfers consist primarily of payments on unrestricted pledges and use of building funds in accordance with donor restrictions for buildings put into use during the year. Expirations of temporary restrictions on net assets, release of permanent restrictions by a donor, and change of restrictions imposed by donors are also reported as reclassifications of net assets among unrestricted, temporarily and permanently restricted net assets.

MIT administers its various funds, including endowments, funds functioning as endowments, school or departmental funds, and related accumulated gains in accordance with the principles of "Fund Accounting." Gifts are recorded in fund accounts and investment income is distributed to funds annually. Income distributed to funds may be a combination of capital appreciation and yield pursuant to MIT's total return investment and spending policies. Each year, the Executive Committee of the Corporation approves the rates of distribution of investment return to the funds from MIT's investment pools. (See Note K for further information on income distributed to funds.)

MIT's operations include tuition, research revenues, unrestricted gifts and bequests for current use, fees and services, other programs, endowment distribution and income from other investments, auxiliary revenues, payments on pledges for unrestricted gifts, and operating expenditures. Results of operations are displayed in the Statement of Activities.

### Tax Status

MIT is a nonprofit organization that is tax-exempt under Section 501(c)(3) of the Internal Revenue Code, originally recognized in October 1926, with the most recent affirmation letter dated July 2001.

US GAAP requires MIT to evaluate tax positions taken by the Institute and recognize a tax liability (or asset) if the Institute has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. MIT has analyzed the tax positions taken and has concluded that as of June 30, 2015, there are no significant uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements.

### Cash

Certain cash balances, totaling $116.4 million and $55.8 million at June 30, 2015 and 2014, respectively, are restricted for use under certain sponsored research agreements or are held on behalf of a related party.

The Institute had approximately $316.1 million and $296.0 million at June 30, 2015 and 2014, respectively, of its cash accounts with a single institution. The Institute has not experienced any losses associated with deposits at this institution.

### Advance Payments

Amounts received by MIT from the US Government, corporations, industrial sources, foundations, and other non-MIT sponsors under the terms of agreements that generally require the exchange of assets, rights, or privileges between MIT and the sponsor are recorded as advance payments. Revenue is recognized as MIT fulfills the terms of the agreements.

### Land, Buildings, and Equipment

Land, buildings, and equipment are shown at cost when purchased or fair value as of the date of a gift when received as gifts, net of accumulated depreciation. When expended, costs associated with the construction of new facilities are shown as construction in progress until such projects are completed and put into use. Depreciation is computed on a straight-line basis over the estimated useful lives of 25 to 50 years for buildings, 3 to 25 years for equipment, and 4 to 6 years for software.

Fully depreciated assets were removed from the financial statements in the amount of $34.3 million and $33.6 million during 2015 and 2014, respectively. Land, buildings, and equipment at June 30, 2015 and 2014 are shown in Table 1.

**Table 1. Land, Buildings, and Equipment**

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| Land . . . . . . . . . . . . . . . . . . | $ 78,528 | $ 67,538 |
| Land improvements. . . . . . . | 64,525 | 64,733 |
| Educational buildings . . . . . | 3,382,438 | 3,281,247 |
| Equipment . . . . . . . . . . . . | 271,326 | 246,026 |
| Software . . . . . . . . . . . . . . | 44,711 | 40,803 |
| Total . . . . . . . . . . . . . . . . . . | 3,841,528 | 3,700,347 |
| Less: accumulated depreciation | (1,364,178) | (1,256,934) |
| Construction in progress . . . | 337,018 | 167,726 |
| Software projects in progress | 7,944 | 13,132 |
| **Net land, buildings, and equipment. . . . . . . . . . .** | **$ 2,822,312** | **$ 2,624,271** |

Depreciation expense was $146.2 million in 2015 and $137.6 million in 2014. Net interest expense of $6.6 million and $4.4 million was capitalized during 2015 and 2014, respectively, in connection with MIT's construction projects.

### Tuition and Student Support

Tuition and similar revenues, shown in Table 2 below, includes tuition and fees in degree programs as well as tuition and fees for executive and continuing education programs at MIT.

**Table 2. Tuition and Similar Revenues**

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| Undergraduate and graduate programs . . . . . . . . . . . . . . . | $ 569,982 | $ 553,344 |
| Executive and continuing education programs . . . . . . . | 42,119 | 42,457 |
| Total . . . . . . . . . . . . . . . . . . . . | 612,101 | 595,801 |
| Less: tuition discount . . . . . . . | (280,282) | (271,299) |
| **Net tuition and similar revenues** | **$ 331,819** | **$ 324,502** |

Tuition support is awarded to undergraduate students by MIT based on need. Graduate students are provided with tuition support in connection with research assistance, teaching assistance, and fellowship appointments. Tuition support from MIT sources is displayed as tuition discount. Total student support granted to students was $498.5 million and $481.8 million in 2015 and 2014, respectively. Of that amount, $161.4 million in 2015 and $157.6 million in 2014 was aid from sponsors. Components of student support are detailed in Table 3 below.

**Table 3. Student Support**

| | 2015 | | | 2014 | | |
|---|---|---|---|---|---|---|
| *(in thousands of dollars)* | Institute Sources | External Sponsors | Total Student Support | Institute Sources | External Sponsors | Total Student Support |
| Undergraduate tuition support . . | $ 92,488 | $ 14,660 | $ 107,148 | $ 88,570 | $ 14,506 | $ 103,076 |
| Graduate tuition support. . . . . . . | 187,794 | 59,567 | 247,361 | 182,729 | 57,293 | 240,022 |
| Fellow stipends . . . . . . . . . . . . . . | 21,469 | 17,290 | 38,759 | 20,934 | 17,858 | 38,792 |
| Student employment. . . . . . . . . . | 35,417 | 69,844 | 105,261 | 31,935 | 67,955 | 99,890 |
| **Total . . . . . . . . . . . . . . . . . . . . . .** | **$ 337,168** | **$ 161,361** | **$ 498,529** | **$ 324,168** | **$ 157,612** | **$ 481,780** |

# A. Accounting Policies (continued)

## Sponsored Research

Direct and indirect categories of research revenues are shown in the table 4 below.

### Table 4. Research Revenues

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| Direct: | | |
| Campus . . . . . . . . . . . . . . . . | $ 482,563 | $ 475,382 |
| Lincoln. . . . . . . . . . . . . . . . . | 844,588 | 791,292 |
| SMART . . . . . . . . . . . . . . . . | 31,620 | 31,519 |
| **Total direct. . . . . . . . . . . . . . . .** | 1,358,771 | 1,298,193 |
| Indirect: | | |
| Campus . . . . . . . . . . . . . . . . | $ 183,020 | $ 188,136 |
| Lincoln. . . . . . . . . . . . . . . . . | 34,739 | 37,367 |
| SMART . . . . . . . . . . . . . . . . | 117 | 98 |
| **Total indirect . . . . . . . . . . . . . .** | 217,876 | 225,601 |
| **Total research revenues . . . . . .** | **$ 1,576,647** | **$ 1,523,794** |

Revenue associated with contracts and grants is recognized as related costs are incurred. The capital costs of buildings and equipment are depreciated over their estimated life cycle, and the sponsored research recovery allowance for depreciation is treated as indirect research revenue. MIT has recorded reimbursement of indirect costs relating to sponsored research at negotiated fixed billing rates. The revenue generated by the negotiated rates is adjusted each fiscal year to reflect any variance between the negotiated fixed rates and rates based on actual cost. The actual cost rate is audited by the Defense Contract Audit Agency (DCAA) and a final fixed-rate agreement is signed by the US Government and MIT. The variance between the negotiated fixed rate and the final audited rate results in a carryforward (over- or under-recovery). The carryforward is included in the calculation of negotiated fixed billing rates in future years. Any adjustment in the rate is charged or credited to unrestricted net assets.

## Gifts and Pledges

Gifts and pledges are recognized when received. Gifts of securities are recorded at their fair value at the date of contribution. Donated securities received totaled $47.2 million and $42.9 million in 2015 and 2014, respectively, and are shown separately in the Statements of Cash Flows. Gifts of equipment received from manufacturers and other donors are put into use and recorded by MIT at fair value. Gifts of equipment totaled $0.3 million in 2015 and $1.3 million in 2014. Pledges in the amount of $558.1 million and $490.3 million were recorded as receivables at June 30, 2015 and 2014, respectively, with the revenue assigned to the appropriate classification of restriction. Pledges consist of unconditional written promises to contribute to MIT in the future and are recorded after discounting the future cash flows to the present value.

MIT records items of collections as gifts at nominal value. They are received for educational purposes and most are displayed throughout MIT. In general, collections are not disposed of for financial gain or otherwise encumbered in any manner.

## Life Income Funds

MIT's life income fund agreements with donors consist primarily of irrevocable charitable gift annuities, pooled income funds, and charitable remainder trusts for which MIT serves as trustee. Assets are invested and payments are made to donors and other beneficiaries in accordance with the respective agreements. MIT records the assets that are associated with each life income fund at fair value and records as liabilities the present value of the estimated future payments at current interest rates to be made to the donors and beneficiaries under these agreements. A rollforward of liabilities due under life income fund agreements is presented in Table 5.

### Table 5. Liabilities Due Under Life Income Funds

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| Balance at the beginning of the year | $ 103,076 | $ 95,259 |
| Addition for new gifts . . . . . . . . | 14,612 | 5,353 |
| Termination and payments to beneficiaries . . . . . . . . . . . . . . | (14,984) | (14,917) |
| Net investment and actuarial gain | 39,242 | 17,381 |
| **Balance at end of the year . . . .** | **$ 141,946** | **$ 103,076** |

## Recently Adopted Accounting Standards

On July 1, 2014, MIT early adopted new guidance about *Fair Value Measurement and Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)*. This guidance requires MIT to show investments that use net asset value (NAV) as a practical expedient for valuation purposes, separately from other investments categorized in the fair value hierarchy described in Footnote B. This disclosure change, which was applied retrospectively, can be seen in the investment leveling tables shown in Footnotes B and J for both fiscal years 2015 and 2014.

On July 1, 2013, MIT adopted new guidance enhancing the disclosures about *Offsetting Assets and Liabilities*. This guidance requires MIT to disclose both gross and net information about instruments and transactions eligible for offset in the statement of assets and liabilities as well as instruments and transactions subject to an agreement similar to a master netting arrangement. It also requires disclosure of collateral received and posted in connection with master netting agreements or similar arrangements. Management has evaluated the impact of the enhanced guidance on the Institute's financial statements and has added the required additional disclosures in Note C.

## A. Accounting Policies (continued)

### Noncontrolling Interests

MIT is the general partner for several private equity funds and has displayed the noncontrolling interests on the Statements of Financial Position.

### Non-Cash Items

Non-cash transactions excluded from the Statements of Cash Flows include $13.3 million and $14.6 million of accrued liabilities related to plant and equipment purchases for 2015 and 2014, respectively.

### Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

### Reclassifications

Certain June 30, 2014 balances and amounts previously reported have been reclassified to conform to the June 30, 2015 presentation.

### Subsequent Events

MIT has evaluated subsequent events through September 11, 2015, the date the financial statements were issued. There were no subsequent events that occurred after the balance sheet date that have a material impact on MIT's financial statements.

### Summarized Information

The Statement of Activities includes certain prior year summarized comparative information in total but not by net asset class. Such information does not include sufficient detail to constitute a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with MIT's financial statements for the year ended June 30, 2014, from which summarized information was derived.

## B. Investments

Investment transactions are accounted for on the trade date. Dividend income is recorded on the ex-dividend date. Realized gains and losses are recorded by MIT using the average cost basis. For limited partnerships, the realized gain/loss is calculated once the entire cost basis is distributed back to MIT or using information provided by managers with respect to the character of a distribution as being a gain or return of capital.

MIT values its investments in accordance with the principles of accounting standards which establish a hierarchy of valuation inputs based on the extent to which the inputs are observable in the marketplace. Observable inputs reflect market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the entity's own assumptions about how market participants would value an asset or liability based on the best information available. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. MIT follows a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last is unobservable.

The following describes the hierarchy of inputs used to measure fair value and the primary valuation methodologies used by MIT for financial instruments measured at fair value on a recurring basis. The three levels of inputs are as follows:

• Level 1 – Quoted prices in active markets for identical assets or liabilities. Market price data is generally obtained from relevant exchanges or dealer markets.

• Level 2 – Inputs other than Level 1 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 or can be corroborated by observable market data for substantially the same term of the assets or liabilities. Inputs are obtained from various sources including market participants, dealers, and brokers.

• Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Market information is considered when determining the proper categorization of the investment's fair value measurement within the fair valuation hierarchy.

Table 6 presents MIT's investments at fair value as of June 30, 2015 and 2014, grouped by the valuation hierarchy as defined earlier in this note. Investments that use NAV as a practical expedient for valuation purposes are shown separately.

Transfers between levels are recognized at the beginning of the reporting period. The 2015 transfers from Level 1 to Level 3 totaled $0.1 million and transfers from Level 1 to Level 2 totaled $9.6 million. There were no level transfers in 2014.

Cash and cash equivalents include cash, money market funds, repurchase agreements and negotiable certificates of deposit and are valued at cost, which approximates fair value. Instruments listed or traded on a securities exchange are valued at the last quoted price on the primary exchange where the security is traded.

## B. Investments (continued)

Investments in non-exchange traded debt are primarily valued using independent pricing sources that use broker quotes or models using market observable inputs. Investments managed by external advisors include investments in absolute return, domestic, foreign and private equity, real estate and real asset commingled funds. The fair value of securities held in external investment funds that do not have readily determinable fair values are determined by the external managers based on appraisals or other estimates that require varying degrees of judgment, taking into consideration, among other things, the cost of the securities, prices of recent significant placements of securities of the same issuer, and subsequent developments concerning the companies to which the securities relate. Using these valuations, most of these external managers calculate MIT's capital account or NAV in accordance with, or in a manner consistent with, GAAP.

As a practical expedient, MIT is permitted under GAAP to estimate the fair value of its investments with external managers using the external managers' reported NAV without further adjustment unless MIT expects to sell the investment at a value other than NAV or the NAV is not calculated in accordance with GAAP.

Level 3 investments are valued by MIT based upon valuation information received from the relevant entity which may include last trade information, third-party appraisals of real estate, or valuations prepared in connection with the administration of an employee stock ownership plan. MIT may also utilize industry standard valuation techniques, including discounted cash flow models. The significant unobservable inputs used in the fair value measurements of MIT's direct investments may include their cost of capital, and equity and industry risk premiums. Significant increases or decreases in these inputs in isolation may result in a significantly lower or higher fair value measurement, respectively. Split-interest agreements are generally valued at the present value of the future distributions expected to be received over the term of the agreement.

Over-the-counter positions such as interest rate and total return swaps, credit default swaps, options, exchange agreements, and interest rate cap and floor agreements are valued using broker quotes or models using market observable inputs. Because the swaps and other over-the-counter derivative instruments have inputs that can usually be corroborated by observable market data, they are generally classified within Level 2.

## B. Investments (continued)

### Table 6. Investments

| *(in thousands of dollars)* | Quoted Prices in Active Markets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) | NAV as Practical Expedient (NAV) | Total Fair Value |
|---|---|---|---|---|---|
| **Fiscal Year 2015** | | | | | |
| Cash and cash equivalents | $ 2,028,407 | $ - | $ - | $ - | $ 2,028,407 |
| US Treasury | 795,335 | - | - | - | 795,335 |
| US Government agency | - | 70,493 | - | - | 70,493 |
| Domestic bonds | 11,917 | 84,072 | 101,763 | - | 197,752 |
| Foreign bonds | 21 | 24,582 | - | - | 24,603 |
| Common equity: | | | | | |
| Long domestic | 243,677 | - | 67,096 | - | 310,773 |
| Long foreign | 567,394 | 4,159 | - | - | 571,553 |
| Short foreign | (6) | - | - | - | (6) |
| Equity:** | | | | | |
| Absolute return | - | - | - | 1,734,169 | 1,734,169 |
| Domestic | - | - | - | 1,880,487 | 1,880,487 |
| Foreign | - | - | - | 3,504,707 | 3,504,707 |
| Private | - | - | - | 3,132,869 | 3,132,869 |
| Real estate* | 19 | 6,282 | 1,985,878 | 785,536 | 2,777,715 |
| Real assets** | - | - | 1,260 | 605,612 | 606,872 |
| Split-interest agreements | - | - | 146,405 | - | 146,405 |
| Other | 3,985 | - | 3,956 | - | 7,941 |
| Derivatives | 47 | (35,967) | - | - | (35,920) |
| Total investments, gross | $ 3,650,796 | $ 153,621 | $ 2,306,358 | $ 11,643,380 | $ 17,754,155 |
| Liabilities associated with investments: | | | | | |
| Real estate*** | - | - | (220,391) | - | (220,391) |
| **Total investments, net** | **$ 3,650,796** | **$ 153,621** | **$ 2,085,967** | **$ 11,643,380** | **$ 17,533,764** |
| **Fiscal Year 2014** | | | | | |
| Cash and cash equivalents | $ 2,691,413 | $ - | $ - | $ - | $ 2,691,413 |
| US Treasury | 779,831 | - | - | - | 779,831 |
| US Government agency | 15 | 74,312 | - | - | 74,327 |
| Domestic bonds | 15,624 | 91,704 | 97,254 | - | 204,582 |
| Foreign bonds | 20 | 22,545 | - | - | 22,565 |
| Common equity: | | | | | |
| Long domestic | 184,018 | 1 | 178,921 | - | 362,940 |
| Long foreign | 422,562 | 6,498 | - | - | 429,060 |
| Short foreign | (5) | - | - | - | (5) |
| Equity:** | | | | | |
| Absolute return | - | - | - | 1,643,868 | 1,643,868 |
| Domestic | - | - | - | 1,438,048 | 1,438,048 |
| Foreign | 71 | - | - | 2,532,278 | 2,532,349 |
| Private | - | - | - | 2,783,585 | 2,783,585 |
| Real estate* | 9,770 | - | 1,773,267 | 860,862 | 2,643,899 |
| Real assets** | - | - | 10,464 | 704,042 | 714,506 |
| Split-interest agreements | - | - | 147,182 | - | 147,182 |
| Other | 8,713 | - | 9,721 | - | 18,434 |
| Derivatives | 82 | (26,722) | - | - | (26,640) |
| Total investments, gross | $ 4,112,114 | $ 168,338 | $ 2,216,809 | $ 9,962,683 | $ 16,459,944 |
| Liabilities associated with investments: | | | | | |
| Real estate*** | - | - | (231,188) | - | (231,188) |
| **Total investments, net** | **$ 4,112,114** | **$ 168,338** | **$ 1,985,621** | **$ 9,962,683** | **$ 16,228,756** |

** Real estate includes direct investments and investments held through commingled vehicles.*

*** Real assets and equity categories include commingled vehicles that invest in these types of investments.*

**** Interest rates are 3.75% to 4.54%. Maturities are in calendar years 2023 and 2030. Principal payments range from $5.4 million in fiscal year 2016 to $40.9 million in fiscal year 2030.*

## B. Investments (continued)

Table 7 is a rollforward of the investments classified by MIT within Level 3 of the fair value hierarchy defined earlier in this footnote at June 30, 2015 and 2014.

### Table 7. Rollforward of Level 3 Investments

| *(in thousands of dollars)* | Fair Value Beginning | Realized Gains (Losses) | Unrealized Gains (Losses) | Purchases | Sales | Transfers | Fair Value Ending |
|---|---|---|---|---|---|---|---|
| **Fiscal Year 2015** | | | | | | | |
| Domestic bonds | $ 97,254 | $ - | $ - | $ 13,276 | $ (8,767) | $ - | $ 101,763 |
| Common equity: | | | | | | | |
| Long domestic | 178,921 | 402 | (104,853) | 600 | (7,989) | 15 | 67,096 |
| Short domestic | - | - | - | - | - | - | - |
| Equity: | | | | | | | |
| Private | - | - | - | - | - | - | - |
| Real estate | 1,773,267 | 76,933 | 289,303 | 193,540 | (347,265) | 100 | 1,985,878 |
| Real assets | 10,464 | - | (9,204) | - | - | - | 1,260 |
| Split-interest agreements | 147,182 | 3,902 | 3,396 | 1,298 | (9,373) | - | 146,405 |
| Other | 9,721 | (183) | 78 | 3 | (5,663) | - | 3,956 |
| Total, gross | $ 2,216,809 | $ 81,054 | $ 178,720 | $ 208,717 | $ (379,057) | $ 115 | $ 2,306,358 |
| Real estate liabilities | (231,188) | - | - | (75,000) | 85,797 | - | (220,391) |
| **Total, net** | **$ 1,985,621** | **$ 81,054** | **$ 178,720** | **$ 133,717** | **$ (293,260)** | **$ 115** | **$ 2,085,967** |
| **Fiscal Year 2014** | | | | | | | |
| Domestic bonds | $ 86,895 | $ - | $ - | $ 20,530 | $ (10,171) | $ - | $ 97,254 |
| Common equity: | | | | | | - | |
| Long domestic | 241,381 | (25) | (62,335) | 7,575 | (7,675) | - | 178,921 |
| Short domestic | (3) | (5) | 2 | 6 | - | - | - |
| Equity: | | | | | | | |
| Private | 33,814 | 17,585 | (16,530) | - | (34,869) | - | - |
| Real estate | 1,481,564 | 41,082 | 174,988 | 398,134 | (323,010) | 509 | 1,773,267 |
| Real assets | 9,602 | - | 862 | - | - | - | 10,464 |
| Split-interest agreements | 148,297 | 634 | 9,597 | 4,716 | (16,062) | - | 147,182 |
| Other | 2,445 | 5 | 272 | 7,587 | (79) | (509) | 9,721 |
| Total, gross | $ 2,003,995 | $ 59,276 | $ 106,856 | $ 438,548 | $ (391,866) | $ - | $ 2,216,809 |
| Real estate liabilities | (82,000) | - | - | (150,000) | 812 | - | (231,188) |
| **Total, net** | **$ 1,921,995** | **$ 59,276** | **$ 106,856** | **$ 288,548** | **$ (391,054)** | **$ -** | **$ 1,985,621** |

All net realized and unrealized gains and losses relating to financial instruments held by MIT shown in Table 6 are reflected in the Statement of Activities. Cumulative unrealized gains related to Level 3 investments totaled $948.9 million and $770.2 million as of June 30, 2015 and 2014, respectively. The net change in unrealized gains (losses) related to Level 3 investments held by MIT at June 30, 2015, and June 30, 2014, are disclosed in Table 7.

MIT enters into short sales whereby it sells securities that may or may not be owned by MIT in anticipation of a decline in the price of such securities or in order to hedge portfolio positions. Cash collateral and certain securities owned by MIT were held at counterparty brokers to collateralize these positions and are included in investments on the Statements of Financial Position.

## B. Investments (continued)

Table 8 below sets forth a summary of valuation techniques and quantitative information utilized in determining the fair value of MIT's Level 3 investments as of June 30, 2015 and 2014.

### Table 8. Level 3 Valuation Techniques

| Asset Type *(in thousands of dollars)* | Fair Value at June 30, 2015 | Fair Value at June 30, 2014 | Valuation Technique | Unobservable Inputs | 2015 Rates | 2014 Rates |
|---|---|---|---|---|---|---|
| Real estate . . . . . . . . . . . | $ 1,765,362 | $ 1,542,069 | Discounted cash flow | Discount Rate | 4.8–9.0% | 5.5–9.0% |
| Equity securities . . . . . . . | 50,653 | 162,416 | Discounted cash flow | Discount Rate | 15.3% | 15.3% |
| Split-interest agreements . | 110,722 | 111,358 | Net present value | Discount Rate | 2.25% | 2.20% |
| Real assets . . . . . . . . . . . | 1,260 | 10,464 | Discount to public price | Discount | 20.0% | 20.0% |
| Other illiquid assets. . . . . | 426 | 1,761 | Varies | Varies | Varies | Varies |
| **Total assets . . . . . . . . . .** | **$ 1,928,423** | **$ 1,828,068** | | | | |

Certain investments in real estate, equities, and private investments may be subject to restrictions that (i) limit MIT's ability to withdraw capital after such investment and (ii) may limit the amount that may be withdrawn as of a given redemption date. Most absolute return, domestic equity, and foreign equity commingled funds limit withdrawals to monthly, quarterly, or other periods, and may require notice periods. In addition, certain of these funds are able to designate a portion of the investments as illiquid in "side-pockets," and these funds may not be available for withdrawal until liquidated by the investing fund. Generally, MIT has no discretion as to withdrawal with respect to its investment in private equity and real estate funds. Distributions are made when sales of assets are made within these funds and the investment cycle for these funds can be as long as 15 to 20 years. These restrictions may limit MIT's ability to respond quickly to changes in market conditions. MIT does have various sources of liquidity at its disposal, including cash, cash equivalents, marketable debt and equity securities, and lines of credit.

Details on the current redemption terms and restrictions by asset class and type of investment are provided in Table 9.

### Table 9. Unfunded Commitments

| Asset Class *(in thousands of dollars)* | 2015 Unfunded Commitments | 2015 Fair Value | 2014 Unfunded Commitments | 2014 Fair Value | Redemption Terms | Redemption Restrictions |
|---|---|---|---|---|---|---|
| Equity: | | | | | | |
| Domestic . . . . . . . | $ 1,923 | $ 1,880,487 | $ 9,983 | $ 1,438,048 | Redemption terms range from 30 days with 2 months notice to 2 years with 3 months notice and 1 closed-end fund not available for redemption | Lock-up provisions range from none to 5 years; 1 fund is not redeemable |
| Foreign. . . . . . . . . | 56,640 | 3,504,707 | 60,880 | 2,532,278 | Redemption terms range from daily with 1 month notice to 3 years with 6 months notice and 1 closed-end fund not available for redemption | Lock-up provisions range from none to 5 years; 1 fund is not redeemable |
| Absolute return . . | 218,025 | 1,734,169 | 171,070 | 1,643,868 | Redemption terms range from 45 days with 2 months notice to closed-end funds which are not redeemable | Lock-up provisions range from none to not redeemable |
| Private . . . . . . . . . | 1,131,554 | 3,132,869 | 1,337,144 | 2,783,585 | Closed-end funds not available for redemption | Not redeemable |
| Real estate . . . . . . . . . | 483,951 | 785,536 | 428,209 | 860,862 | Closed-end funds not available for redemption | Not redeemable |
| Real assets . . . . . . . . . | 116,346 | 605,612 | 140,549 | 704,042 | Redemption terms range from 4 months with 1 month notice to 8 months with 45 days notice for 2 funds with all other funds being closed-end and not redeemable | Not redeemable except for 2 funds with no lock-up provisions |
| **Total . . . . . . . . . . . . .** | **$ 2,008,439** | **$ 11,643,380** | **$ 2,147,835** | **$ 9,962,683** | | |

## B. Investments (continued)

MIT performs ongoing due diligence to determine that investment fair value is reasonable as of June 30, 2015 and 2014. In particular, to ensure that the valuation techniques for investments that are categorized within the fair value hierarchy are fair, consistent, and verifiable, MIT has established a Valuation Committee (the "Committee") that oversees the valuation processes and procedures and ensures that the policies are fair and consistently applied. The Committee is responsible for conducting annual reviews of the valuation policies, evaluating the overall fairness and consistent application of the valuation policies, and performing specific reviews of certain valuations reported. The Committee performs due diligence over the external managers and, based on this review, substantiates NAV as a practical expedient for estimates of fair value of its investments in external managers. The Committee is composed of senior personnel and contains members who are independent of investment functions. The Committee meets annually, or more frequently, as needed. Members of the Valuation Committee report annually to MIT's Risk and Audit Committee. The methods described previously in this footnote may produce a fair value that may not be indicative of net realizable value or reflective of future fair values. While MIT believes its valuation methods are appropriate and consistent with those of other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

## C. Derivative Financial Instruments and Collateral

MIT maintains an interest rate swap agreement to manage the interest cost and risk associated with a portion of its variable rate debt, described in Note G. Under the agreement, MIT pays a fixed rate of 4.91 percent and receives a payment indexed to the Securities Industry and Financial Market Association (SIFMA) on a notional amount of $125.0 million. At June 30, 2015, the swap agreement had a total fair value of ($48.1) million and at June 30, 2014 had a fair value of ($41.3) million. This swap had a total net loss for 2015 of $6.8 million and a total net loss of $0.6 million for 2014. The notional amount of this derivative is not recorded on MIT's Statements of Financial Position.

For its investment management, MIT uses a variety of financial instruments with off-balance sheet risk involving contractual or optional commitments for future settlement. MIT uses these instruments primarily to manage its exposure to extreme market events and fluctuations in asset classes or currencies. Instruments utilized include futures, total return and credit default swaps, and interest rate cap and swaption agreements. The futures are exchange-traded and the swap, swaptions, and cap agreements are executed over the counter.

Total return swaps involve commitments to pay interest in exchange for a market-linked return, both based on notional amounts. To the extent the total return of the security or index underlying the transaction exceeds or falls short of the offsetting interest rate obligation, MIT will receive a payment from or make a payment to the counterparty.

MIT's portfolio of interest rate caps and swaptions is designed for protection from significant increases in interest rates. An interest rate swaption is an option to enter into an interest rate swap agreement on pre-set terms at a future date. The purchaser and seller of the swaption agree on the expiration date, option type, exercise style, the terms of the underlying swap and the type of settlement. As the expiration date approaches, the swaption holder can either notify the seller of its intention to exercise or let the option expire. An interest rate cap places a ceiling on a floating rate of interest on a specified notional principal amount for a specific term. The buyer of the cap uses the cap contract to limit its maximum interest rate exposure. If the buyer's floating rate rises above the cap strike, the cap contract provides for payments from the seller to the buyer of the cap for the difference between the floating rate and the cap strike. If the floating rate remains below the cap strike, no payments are required. The cap buyer is required to pay an upfront fee or premium for the cap. The cap premium charged by the seller depends upon the market's assessment of the probability that rates will move through the cap strike over the time horizon of the deal. The payoff is expected to occur in extreme market conditions that would negatively impact MIT's other assets.

Table 10 summarizes the notional exposure and net ending fair value relative to the financial instruments with off-balance sheet risk as of June 30, 2015 and 2014, related to MIT's investment management. Derivatives held by limited partnerships and commingled investment vehicles pose no off-balance sheet risk to MIT due to the limited liability structure of these investments. To manage the counterparty credit exposure of MIT's direct off-balance sheet financial instruments, MIT requires collateral to the maximum extent possible under normal trading practices. Collateral is moved on a daily basis as required by fluctuations in the market. The collateral is generally in the form of debt obligations issued by the US Treasury or cash. In the event of counterparty default, MIT has the right to use the collateral to offset the loss associated with the replacement of the agreements. MIT enters into arrangements only with counterparties believed to be creditworthy. On June 30, 2015, cash collateral and certain securities owned by MIT were held at counterparty brokers to collateralize these positions and are included in investments on the Statements of Financial Position.

## C. Derivative Financial Instruments and Collateral (continued)

### Table 10. Derivative Financial Instruments

| *(in thousands of dollars)* | Notional Exposure Long | Notional Exposure Short | Net Ending Fair Value * | Net Gain (Loss)** |
|---|---|---|---|---|
| **Fiscal Year 2015** | | | | |
| Fixed income instruments: | | | | |
| Fixed income futures | $ 3,500 | $ (3,400) | $ 47 | $ (82) |
| Options on interest rate exchange agreements | 1,702,000 | - | 8,800 | (10,476) |
| Interest rate caps and floors | 1,000,000 | - | 96 | (485) |
| Interest rate swaps | - | - | - | - |
| Total fixed income instruments | 2,705,500 | (3,400) | 8,943 | (11,043) |
| Commodity and index instruments: | | | | |
| Equity index swaps | - | (212,335) | 5,046 | (25,954) |
| Total commodity and index instruments | - | (212,335) | 5,046 | (25,954) |
| Credit instruments | - | (73,203) | (1,829) | 9 |
| **2015 Total** | **$ 2,705,500** | **$ (288,938)** | **$ 12,160** | **$ (36,988)** |
| **Fiscal Year 2014** | | | | |
| Fixed income instruments: | | | | |
| Fixed income futures | $ - | $ (19,500) | $ 82 | $ 126 |
| Options on interest rate exchange agreements | 2,090,500 | (55,000) | 19,276 | (17,341) |
| Interest rate caps and floors | 1,000,000 | - | 581 | (1,928) |
| Interest rate swaps | - | - | - | (2,059) |
| Total fixed income instruments | 3,090,500 | (74,500) | 19,939 | (21,202) |
| Commodity and index instruments: | | | | |
| Equity index swaps | - | (47,519) | (2,548) | (4,958) |
| Total commodity and index instruments | - | (47,519) | (2,548) | (4,958) |
| Credit instruments | 10,269 | (115,938) | (2,725) | (2,090) |
| **2014 Total** | **$ 3,100,769** | **$ (237,957)** | **$ 14,666** | **$ (28,250)** |

** The fair value of all credit derivative instruments is reflected in investments, at fair value in the Statements of Financial Position.*
*** Net gain (loss) of the credit derivative instruments is located in the non-operating section as net gain (loss) on investments and other assets in the Statement of Activities.*

## C. Derivative Financial Instruments and Collateral (continued)

Table 11 provides further details related to MIT's credit instruments and summarizes the notional amounts and fair value of the purchased and written credit derivatives, classified by the expiration terms and the external credit ratings of the reference obligations at June 30, 2015 and 2014.

The act of entering into a credit default swap contract is often referred to as "buying protection" or "selling protection" on an underlying reference obligation. The buyer is obligated to make premium payments to the seller over the term of the contract in return for a contingent payment upon the occurrence of a credit event with respect to the underlying obligation. The seller bears the obligation to "protect" the buyer in the event of default of the underlying issuer. Upon this event, the cash payment which the buyer receives is equal to the clearing price established by an auction of credit default swap claims, which is designed to approximate the recovery value of an unsecured claim on the issuer in default. The swap will last for a predetermined amount of time, typically five years. Upon termination of the swap, the buyer is no longer obligated to make any premium payments and there is no other exchange of capital.

### Table 11. Credit Derivative Instruments

| | Purchased Protection | | | | Written Protection Notional Amount | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Years to Maturity | | | | | |
| *(in thousands of dollars)* | Purchased Notional Amounts | Purchased Fair Value* | < 5 Years | 5–10 Years | Written Notional Amounts | Offsetting Purchased Credit Protection ** | Net Written Credit Protection | Net Written Credit Protection Fair Value |
| **Fiscal Year 2015** | | | | | | | | |
| Credit rating on underlying or index: | | | | | | | | |
| A- to AAA | $ 44,571 | $ (1,109) | $ 10,000 | $ 34,571 | $ - | $ - | $ - | $ - |
| BBB- to BBB+ | 28,632 | (720) | 5,175 | 23,457 | - | - | - | - |
| **2015 Total** | **$ 73,203** | **$ (1,829)** | **$ 15,175** | **$ 58,028** | **$ -** | **$ -** | **$ -** | **$ -** |
| **Fiscal Year 2014** | | | | | | | | |
| Credit rating on underlying or index: | | | | | | | | |
| A- to AAA | $ 68,692 | $ (1,789) | $ 15,000 | $ 53,692 | $ 10,269 | $ - | $ - | $ 120 |
| BBB- to BBB+ | 36,977 | (975) | 5,000 | 31,977 | - | (10,269) | - | (81) |
| **2014 Total** | **$ 105,669** | **$ (2,764)** | **$ 20,000** | **$ 85,669** | **$ 10,269** | **$ (10,269)** | **$ -** | **$ 39** |

** The fair value of all credit derivative instruments is reflected in investments, at fair value in the Statements of Financial Position.*
*** Net gain (loss) of the credit derivative instruments is located in the non-operating section as net gain (loss) on investments and other assets in the Statement of Activities.*

## C. Derivative Financial Instruments and Collateral (continued)

Counterparty risk may be partially or completely mitigated through master netting agreements included within an International Swap and Derivatives Association, Inc. ("ISDA") Master Agreement between MIT and each of its counterparties. The ISDA Master Agreement allows MIT to offset with the counterparty certain derivative instruments' payables and/or receivables with collateral held with each counterparty. To the extent amounts due from the counterparties are not fully collateralized contractually or otherwise, there is the risk of loss from counterparty non-performance. As of June 30, 2015, MIT has elected not to offset recognized assets and liabilities in the Statements of Financial Position Investments Table. The following tables, 12 and 13, summarize the effect that offsetting of recognized assets and liabilities could have in the Statements of Financial Position Investments Table.

### Table 12. Offsetting of Financial and Derivative Assets and Liabilities

| | 2015 | | | 2014 | | |
|---|---|---|---|---|---|---|
| *(in thousands of dollars)* | Gross Amount | Cash/Treasury Collateral Posted/ (Received) | Net Amount | Gross Amount | Cash/Treasury Collateral Posted/ (Received) | Net Amount |
| **Assets** | | | | | | |
| Counterparty A | $ 4,184 | $ (4,386) | $ (202) | $ 9,250 | $ (9,519) | $ (269) |
| Counterparty B | 59,895 | (61,220) | (1,325) | 46,243 | (47,385) | (1,142) |
| Counterparty C | - | - | - | 27 | - | 27 |
| Counterparty D | - | - | - | - | - | - |
| Counterparty E | - | - | - | - | - | - |
| Counterparty F | - | - | - | - | - | - |
| Counterparty G | 30,088 | (31,004) | (916) | 38,924 | (39,709) | (785) |
| Counterparty H | - | - | - | 42,200 | (43,165) | (965) |
| Counterparty I | - | - | - | - | - | - |
| Counterparty J | - | - | - | - | - | - |
| Counterparty K | 9,759 | (12,495) | (2,736) | 10,646 | (10,599) | 47 |
| **Total assets** | 103,926 | (109,105) | (5,179) | 147,290 | (150,377) | (3,087) |
| **Liabilities** | | | | | | |
| Counterparty A | (2) | - | (2) | (108) | 130 | 22 |
| Counterparty B | (470) | 720 | 250 | (692) | 720 | 28 |
| Counterparty C | (201) | - | (201) | - | - | - |
| Counterparty D | (470) | 721 | 251 | (362) | 305 | (57) |
| Counterparty E | - | - | - | (51) | 205 | 154 |
| Counterparty F | - | - | - | (399) | 335 | (64) |
| Counterparty G | (48,081) | - | (48,081) | (41,300) | - | (41,300) |
| Counterparty H | - | - | - | - | - | - |
| Counterparty I | (316) | 420 | 104 | (378) | 420 | 42 |
| Counterparty J | (369) | 415 | 46 | (801) | 770 | (31) |
| Counterparty K | - | - | - | (2,549) | 2,549 | - |
| **Total liabilities** | (49,909) | 2,276 | (47,633) | (46,640) | 5,434 | (41,206) |
| **Total assets and liabilities, net** | **$ 54,017** | **$ (106,829)** | **$ (52,812)** | **$ 100,650** | **$ (144,943)** | **$ (44,293)** |

Maximum risk of loss from counterparty credit risk on over-the-counter derivatives is generally the aggregate unrealized appreciation in excess of any collateral pledged by the counterparty. ISDA Master Agreements allow MIT or the counterparties to an over-the-counter derivative to terminate the contract prior to maturity in the event either party fails to meet the terms in the ISDA Master Agreements. This would cause an accelerated payment of net liability, if owed to the counterparty.

## C. Derivative Financial Instruments and Collateral (continued)

Table 13 below reconciles the net recognized assets and liabilities, as shown in Table 12, to derivative financial instruments as shown in Table 6.

### Table 13. Reconciliation of Financial and Derivative Assets and Liabilities

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| Derivatives from Table 6 | $ (35,920) | $ (26,640) |
| Repurchase agreements | 89,984 | 127,372 |
| Fixed income futures | (47) | (82) |
| **Total** | **$ 54,017** | **$ 100,650** |

## D. Pledges Receivable

Table 14 below shows the time periods in which pledges receivable at June 30, 2015 and 2014 are expected to be realized.

### Table 14. Pledges Receivable

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| In one year or less | $ 192,149 | $ 156,094 |
| Between one year and five years | 393,518 | 227,752 |
| More than five years | 34,218 | 160,760 |
| Less: allowance for unfulfilled pledges | (61,790) | (54,270) |
| **Pledges receivable, net** | **$ 558,095** | **$ 490,336** |

A review of pledges is periodically made with regard to collectability. As a result, the allowance for pledges that may not be fulfilled is adjusted, and some pledges have been cancelled and are no longer recorded in the financial statements. Pledges are discounted in the amount of $35.5 million and $36.8 million in 2015 and 2014, respectively. MIT has gross conditional pledges, not recorded, for the promotion of education and research of $76.6 million and $39.3 million in 2015 and 2014, respectively. MIT has pledges receivable relating to research in the amount of $28.3 million and $21.4 million in 2015 and 2014, respectively.

Pledges receivable are classified as Level 3 under the valuation hierarchy described in Note B.

Table 15 below is a rollforward of the pledges receivable at June 30, 2015 and 2014.

### Table 15. Rollforward of Pledges Receivable

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| Balance at beginning of the year | $ 490,336 | $ 404,594 |
| New pledges | 201,495 | 191,973 |
| Pledge payments received | (127,446) | (94,377) |
| Decrease (increase) in pledge discount | 1,230 | (2,534) |
| Increase in reserve for unfulfilled pledges | (7,520) | (9,320) |
| **Balance at the end of the year** | **$ 558,095** | **$ 490,336** |

## E. Student Notes Receivable

Table 16 below details the components of student notes receivable at June 30, 2015 and 2014.

### Table 16. Student Notes Receivable

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| Institute-funded student notes receivable | $ 12,894 | $ 13,426 |
| Perkins student notes receivable | 35,784 | 37,743 |
| Total student notes receivable | 48,678 | 51,169 |
| Less: allowance for doubtful accounts | (3,000) | (3,000) |
| **Student notes receivable, net** | **$ 45,678** | **$ 48,169** |

Perkins student notes receivable are funded by the US Government and by MIT. Funds advanced by the US Government for this program are ultimately refundable to the US Government and are classified as liabilities in US Government advances for student loans in the Statements of Financial Position. Due to the nature and terms of the student loans, which are subject to significant restrictions, it is not feasible to determine the fair value of such loans.

### Allowance for Credit Losses

Management regularly assesses the adequacy of the allowance for credit losses 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 economic environment in which the borrowers operate, the level of delinquent loans, the value of any collateral and, where applicable, the existence of any guarantees or indemnifications. MIT's Perkins loans receivable represents the amounts due from current and former students under the Federal Perkins Loan Program. Loans disbursed under the Federal Perkins Loan Program are able to be assigned to the US Government in certain non-repayment situations. In these situations, the Federal portion of the loan balance is guaranteed.

Factors also considered by management when performing its assessment, in addition to general economic conditions and the other factors described above, included, but were not limited to, a detailed review of the aging of the student loan receivable and a review of the default rate by loan category in comparison to prior years. The level of the allowance is adjusted based on the results of management's analysis.

Loans less than 120 days delinquent are deemed to have a minimal delay in payment and are generally not written off but are reserved in accordance with the terms discussed above. Loans more than 120 days delinquent are subject to standard collection practices, including litigation. Only loans that are deemed uncollectible are written off and this only occurs after several years of unsuccessful collection, including placement at more than one external collection agency.

Considering the other factors already discussed herein, management considers the allowance for credit losses at June 30, 2015 and 2014 to be prudent and reasonable. Furthermore, MIT's allowance is general in nature and is available to absorb losses from any loan category. Management believes that the allowance for credit losses at June 30, 2015 and 2014 is adequate to absorb credit losses inherent in the portfolio as of that date.

Changes in the allowance for credit losses for the years ended June 30, 2015 and 2014 were as shown in Table 17.

### Table 17. Rollforward of Allowance for Credit Losses

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| Balance at beginning of the year | $ 3,000 | $ 3,000 |
| Provision for credit losses | 264 | 126 |
| Net charge-offs | (264) | (126) |
| **Balance at the end of the year** | **$ 3,000** | **$ 3,000** |

## F. Accounts Payable, Accruals, and Other Liabilities

MIT's accounts payable, accruals, and other liabilities at June 30, 2015 and 2014 are shown in Table 18 below.

**Table 18. Accounts Payable, Accruals, and Other Liabilities**

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| Accounts payable and accruals | $ 373,825 | $ 352,668 |
| Accrued vacation | 62,463 | 59,291 |
| **Total** | **$ 436,288** | **$ 411,959** |

## G. Borrowings

MIT's outstanding borrowings at June 30, 2015 and 2014 are shown in Table 19 below.

**Table 19. Borrowings**

| *(in thousands of dollars / due dates are calendar based / par values as of 2015)* | 2015 | 2014 |
|---|---|---|
| **Educational plant** | | |
| Massachusetts Development Finance Agency (MassDevelopment) | | |
| Series I, 5.20%, due 2028, par value $30,000 | $ 30,723 | $ 30,781 |
| Series J-1, variable rate, due 2031 | 125,000 | 125,000 |
| Series J-2, variable rate, due 2031 | 125,000 | 125,000 |
| Series K, 5.25%–5.5%, due 2012–2032, par value $203,500 | 213,010 | 213,673 |
| Series L, 3.0%–5.25%, due 2004–2033, par value $141,670 | 150,357 | 151,017 |
| Series M, 5.25%, due 2014–2030, par value $122,000 | 130,264 | 140,437 |
| Series N, par value $0 | - | 327,965 |
| Series O, 4.0%–5.0%, due 2017, par value $88,000 | 89,117 | 268,716 |
| **Total MassDevelopment** | $ 863,471 | $ 1,382,589 |
| Medium Term Notes Series A, 7.125%, due 2026, par value $17,415 | 17,371 | 17,367 |
| Medium Term Notes Series A, 7.25%, due 2096, par value $45,604 | 45,451 | 45,449 |
| Taxable Bonds, Series B, 5.60%, due 2111, par value $750,000* | 747,019 | 746,987 |
| Taxable Bonds, Series C, 4.68%, due 2114, par value $550,000* | 550,000 | 550,000 |
| Taxable Bonds, Series D, 2.051–3.959%, due 2019-2038, par value $522,410** | 522,410 | - |
| Notes payable to bank, variable rate, due 2017 | 113,033 | 83,033 |
| **Total Taxable** | $ 1,995,284 | $ 1,442,836 |
| **Total educational plant** | $ 2,858,755 | $ 2,825,425 |
| **Other** | | |
| Notes payable to bank, variable rate, due 2017 | 63,476 | 93,476 |
| **Total borrowings** | **$ 2,922,231** | **$ 2,918,901** |

** The proceeds of Taxable Bonds, Series B and C were held as investments as of June 30, 2014 and were in the process of being invested in physical assets as of June 30, 2015.*
*** Series D is an advance refunding, defeasing portions of Series N and Series O.*

Fair value of the outstanding debt is approximately 9 and 11 percent greater than the carrying value in 2015 and 2014, respectively. It is classified as Level 3 under the valuation hierarchy described in Note B. Fair value is based on estimates using current interest rates available for similarly rated debt of the same remaining maturities for tax-exempt debt and rates for recent trades for taxable debt.

## G. Borrowings (continued)

The aggregate amounts of debt payments and sinking fund requirements for each of the next five fiscal years are shown in Table 20 below.

**Table 20. Debt Principal Obligations**

| *(in thousands of dollars)* | |
|---|---|
| 2016 | $ 9,585 |
| 2017 | 98,090 |
| 2018 | 26,500 |
| 2019 | 92,410 |
| 2020 | 10,620 |

MIT maintains a line of credit with a major financial institution for an aggregate commitment of $500.0 million. As of June 30, 2015, $323.5 million was available under this line of credit. The line of credit expires on March 31, 2017.

During 2015, MIT issued $522.4 million in Series D taxable bonds to advance refund and defease $275.2 million of Series N and $178.5 million of Series O tax-exempt bonds.

Cash paid for interest on long-term debt in 2015 and 2014 was $128.9 million and $107.2 million, respectively.

Variable interest rates at June 30, 2015 are shown in Table 21 below.

**Table 21. Variable Interest Rates**

| *(in thousands of dollars)* | Amount | Rate |
|---|---|---|
| MassDevelopment Series J-1 | $ 125,000 | 0.05% |
| MassDevelopment Series J-2 | 125,000 | 0.06% |
| Notes payable to bank | 176,509 | 0.79% |

In the event that MIT receives notice of any optional tender on its Series J-1 and Series J-2 variable-rate bonds, or if these bonds become subject to mandatory tender, the purchase price of the bonds will be paid from the remarketing of such bonds. However, if the remarketing proceeds are insufficient, MIT will be obligated to purchase the bonds tendered at 100 percent of par on the tender date.

## H. Commitments and Contingencies

### Federal Government Funding

MIT receives funding or reimbursement from Federal agencies for sponsored research under Government grants and contracts. These grants and contracts provide for reimbursement of indirect costs based on rates negotiated with the Office of Naval Research (ONR), MIT's cognizant Federal agency. MIT's indirect cost reimbursements have been based on fixed rates with carryforward of under-or over-recoveries. At June 30, 2015 and 2014, MIT recorded a net over-recovery of $19.5 million and $14.9 million, respectively.

The DCAA is responsible for auditing indirect charges to grants and contracts in support of ONR's negotiating responsibility. MIT has final audited rates through 2009. MIT's 2015 research revenues of $1,576.6 million include reimbursement of indirect costs of $217.9 million, which includes the adjustment for the variance between the indirect cost income determined by the fixed rates and actual costs for 2015. In 2014, research revenues were $1,523.8 million, which included reimbursement of indirect costs of $225.6 million.

### Leases

At June 30, 2015, there were no capital lease obligations. MIT is committed under certain operating (rental) leases. Rent expense incurred under operating lease obligations was $41.3 million and $45.1 million in 2015 and 2014, respectively. Future minimum payments under operating leases are shown in Table 22 below.

**Table 22. Lease Obligations**

| *(in thousands of dollars)* | |
|---|---|
| 2016 | $ 38,713 |
| 2017 | 39,888 |
| 2018 | 38,761 |
| 2019 | 28,323 |
| 2020 | 28,934 |

### Investments

As of June 30, 2015, $11.3 million of investments were pledged as collateral to various suppliers and Government agencies.

## H. Commitments and Contingencies (continued)

### Future Construction

MIT has contracted for the educational plant in the amount of $225.4 million at June 30, 2015. It is expected that the resources to satisfy these commitments will be provided from unexpended plant funds, anticipated gifts, and unrestricted funds. MIT will be committing additional resources to planned major construction projects and improvements to the current infrastructure over the next several years.

### Related Entities

MIT has entered into agreements, including collaborations with third-party not-for-profit, and for-profit entities, for education, research, and technology transfers. Some of these agreements involve funding from foreign governments. These agreements subject MIT to greater financial risk than do its normal operations. In the opinion of management, the likelihood of realization of increased financial risks by MIT under these agreements is remote.

### General

MIT is subject to certain other legal proceedings and claims that arise in the normal course of operations. In the opinion of management, the ultimate outcome of these actions will not have a material effect on MIT's financial position.

## I. Functional Expense Classification

MIT's expenditures on a functional basis are shown in Table 23 below.

### Table 23. Expenditures by Functional Classification

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| General and administrative | $ 763,680 | $ 713,103 |
| Instruction and unsponsored research | 811,495 | 777,382 |
| Sponsored research | 1,386,334 | 1,283,189 |
| Auxiliary enterprises | 134,076 | 129,692 |
| Operation of Alumni Association | 15,534 | 15,151 |
| **Total operating expenses** | **$ 3,111,119** | **$ 2,918,517** |

## J. Retirement Benefits

MIT offers a defined benefit plan and a defined contribution plan to its employees. The plans cover substantially all MIT employees.

MIT also offers a postretirement welfare benefit plan (certain healthcare and life insurance benefits) for retired employees. Substantially all MIT employees may become eligible for those benefits if they reach a qualifying retirement age while working for MIT. The healthcare component of the welfare plan is paid for in part by retirees, their covered dependents, and beneficiaries. Benefits are provided through various insurance companies whose charges are based either on the claims and administrative expenses paid during the year or annual insured premiums. The life insurance component of the welfare plan includes basic life insurance and supplemental life insurance. The basic life insurance plan is non-contributory and covers the retiree only. The supplemental life insurance plan is paid for by the retiree. MIT maintains a trust to pay for postretirement welfare benefits.

MIT contributes to the defined benefit plan amounts that are actuarially determined to provide the retirement plan with sufficient assets to meet future benefit requirements. There was a $7.5 million and a $20.4 million contribution to the defined benefit plan in 2015 and 2014, respectively. MIT also contributed $28.7 million and $31.5 million to the postretirement welfare benefit plan in 2015 and 2014, respectively.

For purposes of calculating net periodic cost for the defined benefit plan, plan amendments are amortized on a straight-line basis over the average future service to expected retirement of active participants at the date of the amendment. Cumulative gains and losses (including changes in assumptions) in excess of 10 percent of the greater of the projected benefit obligation or the market-related value of assets are amortized over the average future service of active participants. The annual amortization shall not be less than the total amount of unrecognized gains and losses up to $1.0 million.

## J. Retirement Benefits (continued)

The amount contributed and expenses recognized during 2015 and 2014 related to the defined contribution plan were $51.5 million and $48.6 million, respectively.

For purposes of calculating net periodic cost for the postretirement welfare benefit plan, a portion of the current obligation related to the transition to the accounting standard *Employers' Accounting for Postretirement Benefits Other than Pensions* was amortized on a straight-line basis over 20 years from the date of adoption of that statement in 1994.

Plan amendments are amortized on a straight-line basis over the average future service to full eligibility of active participants at the date of amendment. Cumulative gains and losses (including changes in assumptions) in excess of 10 percent of the greater of the plan's obligation or the market-related value of assets are amortized over the average future service of active participants. The annual amortization shall not be less than the total amount of unrecognized gains and losses up to $1.0 million.

### Components of Net Periodic Benefit Cost

Table 24 summarizes the components of net periodic benefit cost recognized in operating activity and other amounts recognized in non-operating activity in unrestricted net assets for the years ended June 30, 2015 and 2014.

**Table 24. Components of Net Periodic Benefit Cost**

| | Defined Benefit Plan | | Postretirement Welfare Benefit Plan | |
|---|---|---|---|---|
| *(in thousands of dollars)* | 2015 | 2014 | 2015 | 2014 |
| **Components of net periodic benefit cost recognized in operating activity:** | | | | |
| Service cost | $ 80,840 | $ 71,661 | $ 25,950 | $ 22,079 |
| Interest cost | 141,805 | 141,213 | 24,453 | 24,210 |
| Expected return on plan assets | (223,648) | (207,532) | (30,623) | (27,204) |
| Amortization of net actuarial loss | 24,596 | 14,066 | 6,064 | 5,822 |
| Amortization of prior service cost | 953 | 953 | (2,801) | (2,801) |
| **Net periodic benefit cost recognized in operating activity** | $ 24,546 | $ 20,361 | $ 23,043 | $ 22,106 |
| **Other amounts recognized in non-operating activity in unrestricted net assets:** | | | | |
| Current year actuarial loss (gain) | 56,748 | (25,547) | (41,250) | (10,811) |
| Amortization of actuarial gain | (24,596) | (14,066) | (6,064) | (5,822) |
| Amortization of prior service cost | (953) | (953) | 2,801 | 2,801 |
| **Total other amounts recognized in non-operating activity** | $ 31,199 | $ (40,566) | $ (44,513) | $ (13,832) |
| **Total recognized** | **$ 55,745** | **$ (20,205)** | **$ (21,470)** | **$ 8,274** |

The estimated net actuarial loss and prior service cost for the defined benefit plan that will be amortized from unrestricted net assets into net periodic benefit cost during the next fiscal year are $20.1 million and $1.0 million, respectively. The estimated net actuarial loss and prior service credit for the postretirement welfare benefit plan that will be amortized from unrestricted net assets into net periodic benefit cost during the next fiscal year are $1.0 million and $(2.8) million, respectively.

## J. Retirement Benefits (continued)

Cumulative amounts recognized as non-operating changes in unrestricted net assets are summarized in Table 25 for the years ended June 30, 2015 and 2014.

### Table 25. Cumulative Amounts Recognized in Unrestricted Net Assets

| *(in thousands of dollars)* | Defined Benefit Plan 2015 | Defined Benefit Plan 2014 | Postretirement Welfare Benefit Plan 2015 | Postretirement Welfare Benefit Plan 2014 |
|---|---|---|---|---|
| Amounts recognized in unrestricted net assets consist of: | | | | |
| Net actuarial loss | $ 315,879 | $ 283,726 | $ 9,626 | $ 56,937 |
| Prior service cost/(credit) | 1,926 | 2,880 | (13,416) | (16,216) |
| **Total cumulative amounts recognized in unrestricted net assets** | **$ 317,805** | **$ 286,606** | **$ (3,790)** | **$ 40,721** |

### Benefit Obligations and Fair Value of Assets

Table 26 summarizes the benefit obligations, plan assets, and amounts recognized in the Statements of Financial Position for MIT's retirement benefit plans. MIT uses a June 30 measurement date for its defined benefit and postretirement welfare benefit plans.

### Table 26. Projected Benefit Obligations and Fair Value of Assets

| *(in thousands of dollars)* | Defined Benefit Plan 2015 | Defined Benefit Plan 2014 | Postretirement Welfare Benefit Plan 2015 | Postretirement Welfare Benefit Plan 2014 |
|---|---|---|---|---|
| Change in projected benefit obligations: | | | | |
| Projected benefit obligations at beginning of year | $ 3,140,704 | $ 2,803,784 | $ 539,262 | $ 479,117 |
| Service cost | 80,840 | 71,661 | 25,950 | 22,079 |
| Interest cost | 141,805 | 141,213 | 24,453 | 24,210 |
| Retiree contributions | - | - | 4,881 | 4,346 |
| Net benefit payments, transfers, and other expenses | (113,739) | (124,927) | (24,232) | (23,512) |
| Assumption changes and actuarial net loss (gain) | 182,078 | 248,973 | (21,349) | 33,022 |
| **Projected benefit obligations at end of the year** | $ 3,431,688 | $ 3,140,704 | $ 548,965 | $ 539,262 |
| Change in plan assets: | | | | |
| Fair value of plan assets at beginning of the year | 3,135,764 | 2,758,276 | 495,372 | 414,981 |
| Actual return on plan assets | 348,975 | 482,053 | 50,522 | 71,038 |
| Employer contributions | 7,500 | 20,362 | 28,651 | 31,514 |
| Retiree contributions | - | - | 4,881 | 4,346 |
| Net benefit payments, transfers, and other expenses | (113,739) | (124,927) | (30,506) | (26,507) |
| **Fair value of plan assets at end of the year** | 3,378,500 | 3,135,764 | 548,920 | 495,372 |
| **Unfunded status at end of the year** | **$ (53,188)** | **$ (4,940)** | **$ (45)** | **$ (43,890)** |
| Amounts recognized in the Statements of Financial Position consist of: | | | | |
| **Total accrued benefit liabilities** | **$ (53,188)** | **$ (4,940)** | **$ (45)** | **$ (43,890)** |

## J. Retirement Benefits (continued)

The accumulated benefit obligation for MIT's defined benefit plan was $3,075.9 million and $2,922.1 million at June 30, 2015 and 2014, respectively.

MIT provides retiree drug coverage through an Employer Group Waiver Plan (EGWP). Under EGWP, the cost of drug coverage is offset through direct federal subsidies, brand-name drug discounts, and reinsurance reimbursements.

### Assumptions and Healthcare Trend Rates

Table 27 summarizes assumptions and healthcare trend rates. The expected long-term rate of return assumption represents the expected average rate of earnings on the funds invested or to be invested to provide for the benefits included in the benefit obligation. The long-term rate of return assumption is determined based on a number of factors, including historical market index returns, the anticipated long-term asset allocation of the plans, historical plan return data, plan expenses, and the potential to outperform market index returns.

**Table 27. Assumptions**

| *(in thousands of dollars)* | Defined Benefit Plan 2015 | Defined Benefit Plan 2014 | Postretirement Welfare Benefit Plan 2015 | Postretirement Welfare Benefit Plan 2014 |
|---|---|---|---|---|
| **Assumptions used to determine benefit obligation as of June 30:** | | | | |
| Discount rate | 4.62% | 4.50% | 4.54% | 4.43% |
| Rate of compensation increase* | 4.00% | 4.00% | | |
| **Assumptions used to determine net periodic benefit cost for the year ended June 30:** | | | | |
| Discount rate | 4.50% | 5.03% | 4.43% | 4.95% |
| Expected long-term return on plan assets | 8.00% | 8.00% | 7.00% | 7.00% |
| Rate of compensation increase* | 4.00% | 4.00% | | |
| **Assumed healthcare cost trend rates:** | | | | |
| Healthcare cost trend rate assumed for next year | | | 7.00% | 7.00% |
| Rate to which the cost trend rate is assumed to decline (the ultimate trend rate) | | | 4.75% | 4.75% |
| Year the rate reaches the ultimate trend rate | | | 2021 | 2021 |

** The average rate of salary increase is assumed to be 4.00% for 2016 and thereafter.*

As an indicator of sensitivity, a one percentage point change in the assumed healthcare cost trend rate would affect 2015 as shown in Table 28 below.

**Table 28. Healthcare Cost Trend Rate Sensitivity**

| *(in thousands of dollars)* | 1% Point Increase | 1% Point Decrease |
|---|---|---|
| Effect on 2015 postretirement service and interest cost | $ 8,457 | $ (6,779) |
| Effect on postretirement benefit obligation as of June 30, 2015 | 79,036 | (64,866) |

### Plan Investments

The investment objectives for the assets of the plans are to minimize expected funding contributions and to meet or exceed the rate of return assumed for plan funding purposes over the long term. The nature and duration of benefit obligations, along with assumptions concerning asset class returns and return correlations, are considered when determining an appropriate asset allocation to achieve the investment objectives.

Investment policies and strategies governing the assets of the plans are designed to achieve investment objectives within prudent risk parameters. Risk management practices include the use of external investment managers, the maintenance of a portfolio diversified by asset class, investment approach, security holdings, and the maintenance of sufficient liquidity to meet benefit obligations as they come due.

## J. Retirement Benefits (continued)

Tables 29A and 29B present investments at fair value of MIT's defined benefit plan and postretirement welfare benefit plan, which are included in plan net assets as of June 30, 2015 and 2014, grouped by the valuation hierarchy detailed in Note B. There were no transfers in and out of Level 1 and Level 2 fair value measurements in 2015 or 2014.

### Table 29A. Defined Benefit Plan Investments

| *(in thousands of dollars)* | Quoted Prices in Active Markets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) | NAV as Practical Expedient (NAV) | Total Fair Value |
|---|---|---|---|---|---|
| **Fiscal Year 2015** | | | | | |
| Cash and cash equivalents | $ 204,917 | $ - | $ - | $ - | $ 204,917 |
| US Treasury | 298,529 | - | - | - | 298,529 |
| US Government agency | - | 11,183 | - | - | 11,183 |
| Foreign bonds | - | 144 | - | - | 144 |
| Common equity: | | | | | |
| Long domestic | 32,253 | - | 74 | - | 32,327 |
| Long foreign | 122,483 | 902 | - | - | 123,385 |
| Equity:* | | | | | |
| Absolute return | - | - | - | 334,619 | 334,619 |
| Domestic | - | - | - | 504,042 | 504,042 |
| Foreign | - | - | - | 809,825 | 809,825 |
| Private | - | - | - | 629,042 | 629,042 |
| Real estate* | - | 1,466 | - | 273,468 | 274,934 |
| Real assets* | - | - | 261 | 133,386 | 133,647 |
| Other | 5,069 | - | 760 | - | 5,829 |
| Derivatives | 13 | 1,209 | - | - | 1,222 |
| **Total plan investments** | **$ 663,264** | **$ 14,904** | **$ 1,095** | **$ 2,684,382** | **$ 3,363,645** |
| **Fiscal Year 2014** | | | | | |
| Cash and cash equivalents | $ 307,951 | $ - | $ - | $ - | $ 307,951 |
| US Treasury | 262,062 | - | - | - | 262,062 |
| US Government agency | - | 14,816 | - | - | 14,816 |
| Foreign bonds | - | - | - | - | - |
| Common equity: | | | | | |
| Long domestic | 34,248 | - | 909 | - | 35,157 |
| Long foreign | 66,543 | - | - | - | 66,543 |
| Equity:* | | | | | |
| Absolute return | - | - | - | 339,650 | 339,650 |
| Domestic | - | - | - | 400,981 | 400,981 |
| Foreign | - | - | - | 660,205 | 660,205 |
| Private | - | - | - | 545,295 | 545,295 |
| Real estate* | - | - | - | 311,942 | 311,942 |
| Real assets* | - | - | 2,706 | 176,446 | 179,152 |
| Other | - | - | 1,191 | - | 1,191 |
| Derivatives | 24 | (1,265) | - | - | (1,241) |
| **Total plan investments** | **$ 670,828** | **$ 13,551** | **$ 4,806** | **$ 2,434,519** | **$ 3,123,704** |

** Real assets, real estate, and equity categories include commingled vehicles that invest in these types of investments.*

## J. Retirement Benefits (continued)

### Table 29B. Postretirement Welfare Benefit Plan Investments

| *(in thousands of dollars)* | Quoted Prices in Active Markets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) | Measured at Net Asset Value (NAV) | Total Fair Value |
|---|---|---|---|---|---|
| **Fiscal Year 2015** | | | | | |
| Cash and cash equivalents | $ 18,502 | $ - | $ - | $ - | $ 18,502 |
| Domestic bonds | - | 71,428 | - | - | 71,428 |
| Foreign bonds | - | 10 | - | - | 10 |
| Common equity: | | | | | |
| Long domestic | 25,177 | - | - | - | 25,177 |
| Long foreign | 18,098 | 123 | - | - | 18,221 |
| Equity:* | | | | | |
| Absolute return | - | - | - | 68,771 | 68,771 |
| Domestic | - | - | - | 79,074 | 79,074 |
| Foreign | - | - | - | 194,610 | 194,610 |
| Private | - | - | - | 48,593 | 48,593 |
| Real estate | - | 200 | - | 20,362 | 20,562 |
| Real assets* | - | - | - | 3,763 | 3,763 |
| Other | 362 | - | - | - | 362 |
| **Total plan investments** | **$ 62,139** | **$ 71,761** | **$ -** | **$ 415,173** | **$ 549,073** |
| **Fiscal Year 2014** | | | | | |
| Cash and cash equivalents | $ 35,960 | $ - | $ - | $ - | $ 35,960 |
| Domestic bonds | - | 78,182 | - | - | 78,182 |
| Foreign bonds | - | - | - | - | - |
| Common equity: | | | | | |
| Long domestic | 26,789 | - | - | - | 26,789 |
| Long foreign | 5,022 | - | - | - | 5,022 |
| Equity:* | | | | | |
| Absolute return | - | - | - | 69,554 | 69,554 |
| Domestic | - | - | - | 65,018 | 65,018 |
| Foreign | - | - | - | 156,344 | 156,344 |
| Private | - | - | - | 32,032 | 32,032 |
| Real estate | - | - | - | 20,677 | 20,677 |
| Real assets* | - | - | - | 6,032 | 6,032 |
| **Total plan investments** | **$ 67,771** | **$ 78,182** | **$ -** | **$ 349,657** | **$ 495,610** |

** Real assets and equity categories include commingled vehicles that invest in these types of investments.*

## J. Retirement Benefits (continued)

Table 30 is a rollforward of the investments classified by MIT's defined benefit plan within Level 3 of the fair value hierarchy defined in Note B as at June 30, 2015 and 2014.

**Table 30. Rollforward of Level 3 Investments**

| *(in thousands of dollars)* | Fair Value Beginning | Realized Gains (Losses) | Unrealized Gains (Losses) | Purchases | Sales | Transfers | Fair Value Ending |
|---|---|---|---|---|---|---|---|
| **Defined Benefit Plan** | | | | | | | |
| **Fiscal Year 2015** | | | | | | | |
| Common equity: | | | | | | | |
| Long domestic . . . . . | $ 909 | $ - | $ (835) | $ - | $ - | $ - | $ 74 |
| Long foreign. . . . . . . | - | - | - | - | - | - | - |
| Real assets . . . . . . . . . . . | 2,706 | - | (2,445) | - | - | - | 261 |
| Other . . . . . . . . . . . . . . | 1,191 | - | (431) | - | - | - | 760 |
| **Total . . . . . . . . . . . . . . .** | **$ 4,806** | **$ -** | **$ (3,711)** | **$ -** | **$ -** | **$ -** | **$ 1,095** |
| **Fiscal Year 2014** | | | | | | | |
| Common equity: | | | | | | | |
| Long domestic . . . . . | $ 2,100 | $ - | $ - | $ - | $ - | $ (1,191) | $ 909 |
| Long foreign. . . . . . . | - | - | - | - | - | - | - |
| Real assets . . . . . . . . . . . | 2,486 | - | 220 | - | - | - | 2,706 |
| Other . . . . . . . . . . . . . . | - | - | - | - | - | 1,191 | 1,191 |
| **Total . . . . . . . . . . . . . . .** | **$ 4,586** | **$ -** | **$ 220** | **$ -** | **$ -** | **$ -** | **$ 4,806** |

## J. Retirement Benefits (continued)

The plans have made investments in various long-lived partnerships, and in other cases have entered into contractual arrangements that may limit their ability to initiate redemptions due to notice periods, lock-ups, and gates. Details on estimated remaining life and current redemption terms and restrictions by asset class and type of investment for both the defined benefit plan and postretirement welfare benefit plan are provided in Table 31 below as of June 30, 2015 and 2014.

### Table 31. Unfunded Commitments

| | 2015 | | 2014 | | | |
|---|---|---|---|---|---|---|
| *(in thousands of dollars)* | Unfunded Commitments | Fair Value | Unfunded Commitments | Fair Value | Redemption Terms | Redemption Restrictions |
| **Defined Benefit Plan** | | | | | | |
| Equity: | | | | | | |
| Domestic | $ 433 | $ 504,042 | $ 1,027 | $ 400,981 | Redemption terms range from 4 months with 30 days notice to 25 months with 3 months notice and 1 closed-end fund not available for redemption | Lock-up provisions range from none to 3 months; 1 fund is not redeemable |
| Foreign | 12,710 | 809,825 | 11,760 | 660,205 | Redemption terms range from daily with 28 days notice to 3 years with 3 months notice | Lock-up provisions range from none to 5 years |
| Absolute return | 65,457 | 334,619 | 44,824 | 339,650 | Redemption terms range from 4 months with 30 days notice to closed-end funds which are not redeemable | Lock-up provisions range from none to not redeemable |
| Private | 232,650 | 629,042 | 269,612 | 545,295 | Closed-end funds not available for redemption | Not redeemable |
| Real estate | 133,612 | 273,468 | 135,912 | 311,942 | Closed-end funds not available for redemption | Not redeemable |
| Real assets | 30,602 | 133,386 | 37,447 | 176,446 | Redemption terms range from 8 months with 45 days notice for 1 fund with all other funds being closed-end and not redeemable | Not redeemable except for 1 fund with no lock-up provisions |
| **Total** | **$ 475,464** | **$ 2,684,382** | **$ 500,582** | **$ 2,434,519** | | |
| **Postretirement Welfare Benefit Plan** | | | | | | |
| Equity: | | | | | | |
| Domestic | $ 48 | $ 79,074 | $ 114 | $ 65,018 | Redemption terms range from 4 months with 30 days notice to 25 months with 3 months notice and 1 closed-end fund not available for redemption | Lock-up provisions range from none to 3 months; 1 fund is not redeemable |
| Foreign | 2,000 | 194,610 | 1,560 | 156,344 | Redemption terms range from 45 days with 10 days notice to 3 years with 3 months notice | Lock-up provisions range from none to 5 years |
| Absolute return | 7,393 | 68,771 | 3,697 | 69,554 | Redemption terms range from 4 months with 30 days notice to closed-end funds which are not redeemable | Lock-up provisions range from none to not redeemable |
| Private | 30,742 | 48,593 | 33,669 | 32,032 | Closed-end funds not available for redemption | Not redeemable |
| Real estate | 16,083 | 20,362 | 13,722 | 20,677 | Closed-end funds not available for redemption | Not redeemable |
| Real assets | 3,889 | 3,763 | 4,675 | 6,032 | Closed-end funds not available for redemption | Not redeemable |
| **Total** | **$ 60,155** | **$ 415,173** | **$ 57,437** | **$ 349,657** | | |

## J. Retirement Benefits (continued)

Target allocations and weighted-average asset allocations of the investment portfolio for the MIT defined benefit plan and postretirement welfare benefit plan at June 30, 2015 and 2014, are shown in Table 32.

**Table 32. Plan Investment Allocation**

| | Defined Benefit Plan | | | Postretirement Welfare Benefit Plan | | |
|---|---|---|---|---|---|---|
| | 2015 Target Allocation | 2015 | 2014 | 2015 Target Allocation | 2015 | 2014 |
| Cash and cash equivalents | 0-10% | 6% | 10% | 0–10% | 3% | 7% |
| Fixed income | 3-13% | 9% | 8% | 10–20% | 13% | 16% |
| Equities | 35.5–75.5% | 63% | 55% | 38–78% | 66% | 58% |
| Marketable alternatives | 7.5–17.5% | 10% | 11% | 9.5–19.5% | 13% | 14% |
| Real assets | 3–13% | 4% | 6% | 0–7.5% | 1% | 1% |
| Real estate | 6–16% | 8% | 10% | 0–10% | 4% | 4% |
| **Total** | | **100%** | **100%** | | **100%** | **100%** |

Table 33 summarizes the notional exposure and net ending fair value of derivative financial instruments held by the MIT defined benefit plan at June 30, 2015 and 2014. Refer to Note C for a detailed discussion regarding derivative financial instruments.

**Table 33. Derivative Financial Instruments for Defined Benefit Plan**

| | Notional Exposure | | | |
|---|---|---|---|---|
| *(in thousands of dollars)* | Long | Short | Net Ending Fair Value Amount | Net Gain (Loss) |
| **Fiscal Year 2015** | | | | |
| Fixed income instruments: | | | | |
| Fixed income futures | $ 2,500 | $ (1,000) | $ 13 | $ (23) |
| Interest rate swaps | - | - | - | - |
| Total fixed income instruments | 2,500 | (1,000) | 13 | (23) |
| Commodity and index instruments: | | | | |
| Equity index swaps | - | (50,851) | 1,209 | (10,835) |
| Total commodity and index instruments | - | (50,851) | 1,209 | (10,835) |
| Credit instruments | - | - | - | - |
| **2015 Total** | **$ 2,500** | **$ (51,851)** | **$ 1,222** | **$ (10,858)** |
| **Fiscal Year 2014** | | | | |
| Fixed income instruments: | | | | |
| Fixed income futures | $ 200 | $ (4,700) | $ 24 | $ 73 |
| Interest rate swaps | - | - | - | - |
| Total fixed income instruments | 200 | (4,700) | 24 | 73 |
| Commodity and index instruments: | | | | |
| Equity index swaps | - | (23,573) | (1,265) | (89) |
| Total commodity and index instruments | - | (23,573) | (1,265) | (89) |
| Credit instruments | - | - | - | - |
| **2014 Total** | **$ 200** | **$ (28,273)** | **$ (1,241)** | **$ (16)** |

## J. Retirement Benefits (continued)

Counterparty risk may be partially or completely mitigated through master netting agreements included within an International Swap and Derivatives Association, Inc. ("ISDA") Master Agreement between the Plan and each of its counterparties. The ISDA Master Agreement allows the Plan to offset with the counterparty certain derivative instruments' payables and/or receivables with collateral held with each counterparty.

To the extent amounts due from the counterparties are not fully collateralized contractually or otherwise, there is the risk of loss from counterparty non-performance. As of June 30, 2015, the Plan has elected not to offset recognized assets and liabilities in the Defined Benefit Plan Investments Table. The following tables, 34 and 35, summarize the effect that offsetting of recognized assets and liabilities could have in the Defined Benefit Plan Investments Table.

### Table 34. Offsetting of Financial and Derivative Assets and Liabilities

| | 2015 | | | 2014 | | |
|---|---|---|---|---|---|---|
| *(in thousands of dollars)* | Gross Amount | Cash/Treasury Collateral Posted/ (Received) | Net Amount | Gross Amount | Cash/Treasury Collateral Posted/ (Received) | Net Amount |
| **Assets** | | | | | | |
| Counterparty A | $ 1,209 | $ (2,950) | $ (1,741) | $ - | $ - | $ - |
| **Total assets** | $ 1,209 | $ (2,950) | $ (1,741) | $ - | $ - | $ - |
| **Liabilities** | | | | | | |
| Counterparty A | $ - | $ - | $ - | $ (1,265) | $ 1,330 | $ 65 |
| **Total liabilities** | - | - | - | (1,265) | 1,330 | 65 |
| **Total assets and liabilities, net** | **$ 1,209** | **$ (2,950)** | **$ (1,741)** | **$ (1,265)** | **$ 1,330** | **$ 65** |

Maximum risk of loss from counterparty credit risk on over-the-counter derivatives is generally the aggregate unrealized appreciation in excess of any collateral pledged by the counterparty. ISDA Master Agreements allow the Plan or the counterparties to an over-the-counter derivative to terminate the contract prior to maturity in the event either party fails to meet the terms in the ISDA Master Agreements. This would cause an accelerated payment of net liability, if any owed to the counterparty.

Table 35 below reconciles the net recognized assets and liabilities, as shown in Table 34, to derivative financial instruments as shown in Table 29A.

### Table 35. Reconciliation of Financial and Derivative Assets and Liabilities

| *(in thousands of dollars)* | 2015 | 2014 |
|---|---|---|
| Derivatives from Table 29A | $ 1,222 | $ (1,241) |
| Fixed income futures | (13) | (24) |
| **Total** | **$ 1,209** | **$ (1,265)** |

## J. Retirement Benefits (continued)

### Expected Future Benefit Payments

In 2016, MIT expects to make contributions of $21.9 million and $23.2 million to its defined benefit pension plan and post-retirement welfare benefit plan, respectively. These contributions have been estimated based on the same assumptions used to measure MIT's benefit obligations at June 30, 2015.

Table 36 reflects total expected benefit payments for the defined benefit and postretirement welfare benefit plans. These payments have been estimated based on the same assumptions used to measure MIT's benefit obligations at June 30, 2015.

**Table 36. Expected Future Benefit Payments**

| *(in thousands of dollars)* | Pension Benefits | Other Benefits* |
|---|---|---|
| 2016 | $ 144,557 | $ 25,230 |
| 2017 | 151,687 | 27,342 |
| 2018 | 156,611 | 29,084 |
| 2019 | 162,670 | 30,511 |
| 2020 | 169,197 | 31,857 |
| 2021–2025 | 945,966 | 182,062 |

** Other benefits reflect the total net benefits expected to be paid from the plans (e.g., gross benefit reimbursement offset by retiree contributions).*

## K. Components of Net Assets and Endowment

Table 37 presents the total net assets composition as of June 30, 2015. The amounts listed in the unrestricted category under endowment funds are those gifts and other funds received over the years that MIT designated as funds functioning as endowment and invested with the endowment funds. A large component of temporarily restricted net assets in other invested funds is pledges, the majority of which will be reclassified to unrestricted net assets when cash is received.

### Table 37. Total Net Asset Composition

| | 2015 | | | | |
|---|---|---|---|---|---|
| *(in thousands of dollars)* | Unrestricted | Temporarily Restricted | Permanently Restricted | Total | 2014 Total |
| **Endowment funds** | | | | | |
| General purpose | $ 900,984 | $ 1,115,371 | $ 227,474 | $ 2,243,829 | $ 2,067,894 |
| Departments and research | 625,386 | 1,096,170 | 609,789 | 2,331,345 | 2,114,376 |
| Library | 12,077 | 24,660 | 15,073 | 51,810 | 45,792 |
| Salaries and wages | 549,714 | 2,696,320 | 684,765 | 3,930,799 | 3,630,002 |
| Graduate general | 89,489 | 156,713 | 98,159 | 344,361 | 314,380 |
| Graduate departments | 120,290 | 372,942 | 250,894 | 744,126 | 659,938 |
| Undergraduate | 225,798 | 1,143,805 | 355,383 | 1,724,986 | 1,580,124 |
| Prizes | 8,754 | 32,580 | 20,551 | 61,885 | 57,016 |
| Miscellaneous | 1,133,931 | 251,230 | 279,334 | 1,664,495 | 1,606,546 |
| Investment income held for distribution | 377,107 | - | - | 377,107 | 349,063 |
| Endowment funds before pledges | 4,043,530 | 6,889,791 | 2,541,422 | 13,474,743 | 12,425,131 |
| Pledges | - | - | 213,196 | 213,196 | 164,647 |
| **Total endowment funds** | 4,043,530 | 6,889,791 | 2,754,618 | 13,687,939 | 12,589,778 |
| **Other Invested Funds** | | | | | |
| Student loan funds | 20,052 | - | 18,262 | 38,314 | 37,842 |
| Building funds | 49,111 | 54,879 | - | 103,990 | 134,092 |
| Designated purposes: | | | | | |
| Departments and research | 355,371 | - | - | 355,371 | 304,097 |
| Other purposes | 415,061 | 45,203 | - | 460,264 | 496,317 |
| Life income funds | 6,022 | 31,917 | 108,988 | 146,927 | 158,043 |
| Pledges | - | 344,899 | - | 344,899 | 325,688 |
| Other funds available for current expenses | 1,485,072 | 186,758 | - | 1,671,830 | 1,364,418 |
| Funds expended for educational plant | 697,039 | - | - | 697,039 | 617,392 |
| **Total other invested funds** | 3,027,728 | 663,656 | 127,250 | 3,818,634 | 3,437,889 |
| Noncontrolling interests | 232,415 | - | - | 232,415 | 287,825 |
| **Total net assets at fair value** | **$ 7,303,673** | **$ 7,553,447** | **$ 2,881,868** | **$ 17,738,988** | **$ 16,315,492** |

## K. Components of Net Assets and Endowment (continued)

MIT's endowment consists of approximately 3,800 individual funds established for a variety of purposes and includes both donor-restricted endowment funds and funds designated by the Executive Committee of the MIT Corporation (Executive Committee) to function as endowments. As required by GAAP, net assets associated with endowment funds, including funds designated by the Executive Committee to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

The Executive Committee has interpreted the Massachusetts-enacted version of the Uniform Prudent Management of Institutional Funds Act (UPMIFA) as allowing MIT to appropriate for expenditure or accumulate so much of an endowment fund as MIT determines is prudent for the uses, benefits, purposes, and duration for which the endowment fund is established, subject to the intent of the donor as expressed in the gift instrument. Unless stated otherwise in the gift instrument, the assets in an endowment fund shall be donor-restricted assets until appropriated for expenditure by the Executive Committee. As a result of this interpretation, MIT has not changed the way permanently restricted net assets are classified. (See Note A for further information on net asset classification.) The remaining portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure in a manner consistent with the standard of prudence prescribed by UPMIFA. In accordance with UPMIFA, the Executive Committee considers the following factors in making a determination to appropriate or accumulate endowment funds:

i. the duration and preservation of the fund
ii. the purposes of MIT and the endowment fund
iii. general economic conditions
iv. the possible effects of inflation and deflation
v. the expected total return from income and the appreciation of investments
vi. other resources of MIT
vii. the investment policies of MIT

### Table 38. Endowment Net Asset Composition by Type of Fund

| *(in thousands of dollars)* | Unrestricted | Temporarily Restricted | Permanently Restricted | Total |
|---|---|---|---|---|
| **Fiscal Year 2015** | | | | |
| Donor-restricted endowment funds. . . . . . . . . . . . . . . . . . . . | $ - | $ 6,889,791 | $ 2,754,618 | $ 9,644,409 |
| Board-designated endowment funds . . . . . . . . . . . . . . . . . . . | 4,043,530 | - | - | 4,043,530 |
| **Total endowment funds. . . . . . . . . . . . . . . . . . . . . . . . . . .** | **$ 4,043,530** | **$ 6,889,791** | **$ 2,754,618** | **$ 13,687,939** |
| **Fiscal Year 2014** | | | | |
| Donor-restricted endowment funds. . . . . . . . . . . . . . . . . . . . | $ - | $ 6,169,847 | $ 2,710,357 | $ 8,880,204 |
| Board-designated endowment funds . . . . . . . . . . . . . . . . . . . | 3,709,574 | - | - | 3,709,574 |
| **Total endowment funds. . . . . . . . . . . . . . . . . . . . . . . . . . .** | **$ 3,709,574** | **$ 6,169,847** | **$ 2,710,357** | **$ 12,589,778** |

### Underwater Endowment Funds

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the value of the initial and subsequent donor gift amounts (underwater). When underwater endowment funds exist, they are classified as a reduction of unrestricted net assets. There were no underwater endowment funds reported in unrestricted net assets as of June 30, 2015 and June 30, 2014.

## K. Components of Net Assets and Endowment (continued)

### Table 39. Changes in Endowment Net Assets

| *(in thousands of dollars)* | Unrestricted | Temporarily Restricted | Permanently Restricted | Total |
|---|---|---|---|---|
| **Fiscal Year 2015** | | | | |
| Endowment net assets, July 1, 2014 | $ 3,709,574 | $ 6,169,847 | $ 2,710,357 | $ 12,589,778 |
| Investment return: | | | | |
| Investment income | 29,346 | 63,752 | 7,738 | 100,836 |
| Net appreciation (realized and unrealized) | 448,256 | 1,029,171 | (100,887) | 1,376,540 |
| Total investment return | 477,602 | 1,092,923 | (93,149) | 1,477,376 |
| Contributions | - | - | 88,376 | 88,376 |
| Appropriation of endowment assets for expenditure | (165,768) | (375,259) | (4,834) | (545,861) |
| Other changes: | | | | |
| Underwater gain adjustment | - | - | - | - |
| Net asset reclassifications and transfers to create board-designated endowment funds | 22,122 | 2,280 | 53,868 | 78,270 |
| **Endowment net assets, June 30, 2015** | **$ 4,043,530** | **$ 6,889,791** | **$ 2,754,618** | **$ 13,687,939** |
| **Fiscal Year 2014** | | | | |
| Endowment net assets, July 1, 2013 | $ 3,228,902 | $ 5,171,454 | $ 2,605,576 | $ 11,005,932 |
| Investment return: | | | | |
| Investment income | 26,120 | 51,051 | 17,590 | 94,761 |
| Net appreciation (realized and unrealized) | 576,974 | 1,294,684 | (59,564) | 1,812,094 |
| Total investment return | 603,094 | 1,345,735 | (41,974) | 1,906,855 |
| Contributions | - | - | 117,208 | 117,208 |
| Appropriation of endowment assets for expenditure | (158,367) | (346,848) | (10,216) | (515,431) |
| Other changes: | | | | |
| Underwater gain adjustment | 1,191 | (1,191) | - | - |
| Net asset reclassifications and transfers to create board-designated endowment funds | 34,754 | 697 | 39,763 | 75,214 |
| **Endowment net assets, June 30, 2014** | **$ 3,709,574** | **$ 6,169,847** | **$ 2,710,357** | **$ 12,589,778** |

## K. Components of Net Assets and Endowment (continued)

### Investment and Spending Policies

MIT maintains its investments primarily in two investment pools: Pool A, principally for endowment and funds functioning as endowment, and Pool C, principally for investment of current funds of MIT's schools and departments and MIT's operating funds. Pool A operates as a mutual fund with units purchased and redeemed based on the previous month's unit market value of Pool A. The total market value of Pool A was $14,957.1 million at June 30, 2015 and $13,654.9 million at June 30, 2014. Pool A includes certain operating and life income funds totaling $1,652.2 million at June 30, 2015 and $1,512.6 million at June 30, 2014. Certain assets are also maintained in separately invested funds. Separately invested funds totaled $176.3 million at June 30, 2015 and $282.8 million at June 30, 2014.

MIT has adopted endowment investment and spending policies designed to provide a predictable stream of funding to programs supported by its endowment while maintaining the purchasing power of endowment assets. An additional investment goal is to maximize return relative to appropriate risk such that performance exceeds appropriate benchmark returns at the total pool, asset class, and individual manager levels.

To achieve its long-term rate-of-return objectives, MIT relies on a total return strategy in which investment returns are realized through both capital appreciation (realized and unrealized gains) and current yield (interest and dividends). MIT targets a diversified asset allocation that places greater emphasis on equity-based investments to achieve its long-term objectives within prudent risk constraints.

The Executive Committee of the Corporation votes to distribute funds for operational support from general investments. In accordance with MIT's spending policy, these distributions are funded from both investment income and market appreciation. The distribution rates were $65.33 and $62.90 per Pool A unit as of June 30, 2015 and 2014, respectively. In 2015, the amount distributed for spending from Pool A and Pool C totaled $670.3 million, compared to $623.5 million distributed in 2014. Included in this amount was a special distribution of $34.7 million and $31.1 million from gains in Pool C in 2015 and 2014, respectively. During 2015, distributions from separately invested funds were $5.5 million, compared to $10.9 million in 2014. The income earned in Pool C, or currently invested funds, was fully distributed.

pwc

## Independent Auditor's Report

To the Risk and Audit Committee of the
Massachusetts Institute of Technology:

We have audited the consolidated financial statements, as listed in the accompanying table of contents, of the Massachusetts Institute of Technology (the "Institute"), which comprise the consolidated statement of financial position as of June 30, 2015, and the related consolidated statements of activities and cash flows for the years 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 audits. We conducted our audits 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 Institute'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 Institute'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, as listed in the accompanying table of contents, present fairly, in all material respects, the financial position of the Massachusetts Institute of Technology as of June 30, 2015, and the changes in their net assets, and their 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 the Massachusetts Institute of Technology's 2014 financial statements, and we expressed an unmodified audit opinion on those financial statements in our report dated September 12, 2014. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2014 is consistent, in all material respects, with the audited financial statements from which it has been derived.

PricewaterhouseCoopers LLP

September 11, 2015

*PricewaterhouseCoopers LLP, 125 High Street, Boston, MA 02110*
*T: (617) 530 5000, F: (617) 530 5001, www.pwc.com/us*

# Massachusetts Institute of Technology

## Five-Year Trend Analysis – Financial Highlights

| *(in thousands of dollars)* | 2015 | 2014 | 2013 | 2012 | 2011 |
|---|---|---|---|---|---|
| **Financial Position** | | | | | |
| Investments, at fair value | $ 17,533,764 | $ 16,228,756 | $ 13,830,100 | $ 12,847,866 | $ 12,236,531 |
| Land, buildings, and equipment, at cost less accumulated depreciation | 2,822,312 | 2,624,271 | 2,516,264 | 2,497,711 | 2,451,479 |
| Borrowings | 2,922,231 | 2,918,901 | 2,428,215 | 2,460,002 | 2,467,825 |
| Total assets | 21,902,855 | 20,358,797 | 17,719,840 | 16,738,758 | 16,052,231 |
| Total liabilities | 4,163,867 | 4,043,305 | 3,586,966 | 3,939,414 | 3,664,500 |
| Unrestricted net assets | 7,303,673 | 6,754,956 | 5,775,618 | 4,888,952 | 4,885,321 |
| Temporarily restricted net assets | 7,553,447 | 6,718,225 | 5,644,291 | 5,297,554 | 5,044,519 |
| Permanently restricted net assets | 2,881,868 | 2,842,311 | 2,712,965 | 2,612,838 | 2,457,891 |
| Total net assets | 17,738,988 | 16,315,492 | 14,132,874 | 12,799,344 | 12,387,731 |
| Total endowment funds before pledges | 13,474,743 | 12,425,131 | 10,857,976 | 10,149,564 | 9,712,628 |
| **Principal Sources of Revenues** | | | | | |
| Tuition and similar revenues | $ 612,101 | $ 595,801 | $ 568,957 | $ 527,702 | $ 493,777 |
| Research revenues: | | | | | |
| Campus direct | 482,563 | 475,382 | 473,220 | 471,155 | 456,416 |
| Campus indirect | 183,020 | 188,136 | 188,742 | 183,200 | 162,497 |
| Lincoln Laboratory direct | 844,588 | 791,292 | 860,190 | 819,645 | 770,672 |
| Lincoln Laboratory indirect | 34,739 | 37,367 | 30,783 | 25,263 | 34,111 |
| SMART direct | 31,620 | 31,519 | 47,332 | 28,311 | 23,300 |
| SMART indirect | 117 | 98 | 193 | 276 | 210 |
| Gifts, bequests, and pledges | 493,690 | 452,655 | 325,018 | 433,424 | 522,409 |
| Net gain (loss) on investments and other assets | 1,651,600 | 2,152,933 | 1,164,164 | 738,308 | 1,483,669 |
| Investment income and distributions | 675,744 | 634,454 | 604,753 | 554,627 | 505,503 |
| **Principal Purposes of Expenditures** | | | | | |
| Total operating expenditures | $ 3,111,119 | $ 2,918,517 | $ 2,908,577 | $ 2,744,586 | $ 2,571,147 |
| General and administrative | 763,680 | 713,103 | 681,505 | 604,320 | 523,676 |
| Instruction and unsponsored research | 811,495 | 777,382 | 692,032 | 673,851 | 659,839 |
| Direct cost of sponsored research current dollars | 1,386,334 | 1,283,189 | 1,397,857 | 1,335,638 | 1,265,776 |
| Direct cost of sponsored research constant dollars (2011 = 100) | 1,295,019 | 1,207,395 | 1,335,834 | 1,297,619 | 1,265,776 |

# Massachusetts Institute of Technology
## Five-Year Trend Analysis – Financial Highlights (continued)

| *(in thousands of dollars)* | 2015 | 2014 | 2013 | 2012 | 2011 |
|---|---|---|---|---|---|
| **Research Revenues** | | | | | |
| **Campus** | | | | | |
| Federal Government sponsored: | | | | | |
| Health and Human Services | $ 116,469 | $ 115,075 | $ 119,908 | $ 133,687 | $ 152,664 |
| Department of Defense | 125,854 | 122,761 | 127,967 | 117,458 | 107,753 |
| Department of Energy | 81,528 | 88,451 | 88,988 | 90,940 | 89,562 |
| National Science Foundation | 78,953 | 78,979 | 79,255 | 81,487 | 74,859 |
| National Aeronautics and Space Administration | 41,740 | 32,062 | 29,835 | 30,204 | 28,080 |
| Other Federal | 15,435 | 17,610 | 19,994 | 18,807 | 16,602 |
| Total Federal | 459,979 | 454,938 | 465,947 | 472,583 | 469,520 |
| Non-Federally sponsored: | | | | | |
| State/local/foreign governments | 27,951 | 28,967 | 33,429 | 38,273 | 32,969 |
| Nonprofits | 78,667 | 72,118 | 58,227 | 48,373 | 44,436 |
| Industry | 119,238 | 112,379 | 106,447 | 109,745 | 100,763 |
| Total non-Federal | 225,856 | 213,464 | 198,103 | 196,391 | 178,168 |
| Total Federal and non-Federal | 685,835 | 668,402 | 664,050 | 668,974 | 647,688 |
| F&A and other adjustments | (20,252) | (4,884) | (2,088) | (14,619) | (28,775) |
| Total campus | 665,583 | 663,518 | 661,962 | 654,355 | 618,913 |
| **Lincoln Laboratory** | | | | | |
| Federal Government sponsored | 886,637 | 809,011 | 882,462 | 844,202 | 803,599 |
| Non-Federally sponsored | 3,609 | 2,333 | 1,622 | 2,023 | 2,511 |
| F&A and other adjustments | (10,919) | 17,315 | 6,889 | (1,317) | (1,327) |
| Total Lincoln Laboratory | 879,327 | 828,659 | 890,973 | 844,908 | 804,783 |
| **SMART** [(A)] | | | | | |
| Non-Federally sponsored | 31,737 | 31,617 | 47,525 | 28,587 | 23,510 |
| Total SMART | 31,737 | 31,617 | 47,525 | 28,587 | 23,510 |
| **Total research revenues** | **$ 1,576,647** | **$ 1,523,794** | **$ 1,600,460** | **$ 1,527,850** | **$ 1,447,206** |

[(A)] *The amounts represent research that has predominantly taken place in Singapore.*

# Massachusetts Institute of Technology

## Five-Year Trend Analysis – Financial Highlights (continued)

| | 2015 | 2014 | 2013 | 2012 | 2011 |
|---|---|---|---|---|---|
| **Students** | | | | | |
| Undergraduate: | | | | | |
| Full-time | 4,476 | 4,499 | 4,480 | 4,354 | 4,252 |
| Part-time | 36 | 29 | 23 | 30 | 47 |
| Undergraduate applications: | | | | | |
| Applicants | 18,356 | 18,989 | 18,109 | 17,909 | 16,632 |
| Accepted | 1,447 | 1,548 | 1,620 | 1,742 | 1,676 |
| Acceptance rate | 8% | 8% | 9% | 10% | 10% |
| Enrolled | 1,043 | 1,115 | 1,135 | 1,126 | 1,067 |
| Yield | 72% | 72% | 70% | 65% | 64% |
| Freshman ranking in the top 10% of their class | 97% | 99% | 98% | 97% | 98% |
| Average SAT Scores (math and verbal) | 1,500 | 1,492 | 1,481 | 1,472 | 1,473 |
| Graduate: | | | | | |
| Full-time | 6,630 | 6,639 | 6,537 | 6,342 | 6,108 |
| Part-time | 177 | 134 | 149 | 168 | 159 |
| Graduate applications: | | | | | |
| Applicants | 24,468 | 24,029 | 22,588 | 22,219 | 22,139 |
| Accepted | 3,718 | 3,320 | 3,504 | 3,306 | 3,431 |
| Acceptance rate | 15% | 14% | 16% | 15% | 15% |
| Enrolled | 2,441 | 2,163 | 2,229 | 2,118 | 2,141 |
| Yield | 66% | 65% | 64% | 64% | 62% |
| **Tuition** *(in dollars)* | | | | | |
| Tuition and fees | $ 45,016 | $ 43,498 | $ 42,050 | $ 40,732 | $ 39,212 |
| Average room and board | 13,224 | 12,744 | 12,188 | 11,775 | 11,234 |
| **Student Support** *(in thousands of dollars)* | | | | | |
| Undergraduate tuition support | $ 107,148 | $ 103,076 | $ 101,831 | $ 102,081 | $ 92,060 |
| Graduate tuition support | 247,361 | 240,022 | 226,158 | 215,702 | 201,995 |
| Fellowship stipends | 38,759 | 38,792 | 36,173 | 33,263 | 30,435 |
| Student loans | 8,348 | 9,095 | 9,669 | 9,556 | 9,968 |
| Student employment | 105,261 | 99,890 | 96,446 | 90,135 | 85,335 |
| **Total student support** | **$ 506,877** | **$ 490,875** | **$ 470,277** | **$ 450,737** | **$ 419,793** |
| **Faculty and Staff** *(including unpaid appointments)* | | | | | |
| Faculty | 1,021 | 1,030 | 1,022 | 1,018 | 1,017 |
| Staff and fellows | 14,307 | 13,787 | 13,416 | 13,109 | 12,662 |

# Report of the Treasurer

for the year ended

June 30, 2015

Massachusetts
Institute of
Technology