

## **Executive Vice President and Treasurer**

The overarching goals of the Office of the Executive Vice President (EVP) and Treasurer are to provide services that are worthy of MIT and to become the model of a highly diverse, highly committed workforce supporting the mission of the Institute. This report gives a flavor for the work that has been done in support of the Institute's academic and research missions and complements the detailed reports that have been prepared by each department head under the EVP umbrella.

AY2009 was marked by a global financial crisis, volatile financial markets, and a severe economic contraction. These external shocks posed a profound challenge to MIT and the Office of the EVP and Treasurer for most of AY2009 that will continue for many years to come. Actions that were already under way to strengthen operations and financial planning capabilities, however, put us in a strong position to address the challenges and accelerate our progress.

Highlights and key accomplishments or goals for departments are summarized in the sections below. One critical priority and undertaking—common across all units—was resource planning, given this year's economic challenges. We have maintained and in some cases improved service levels in light of budget cuts, and we will continue to work diligently on these efforts in the coming year.

In addition to our own departmentally initiated work to improve our services, this year was also marked by two Institute-wide processes that called for extensive reflection, review, analysis, and assessment of our operations. Our staff were very engaged in the work of the Institute-wide Planning Task Force. Vice president for finance Israel Ruiz served as a member of the Task Force Coordinating Team, and 29 EVP staff served as members of the working groups. A data and analysis group, consisting of three of our staff and the director of institutional research, helped the working groups develop fact-based recommendations by supplying financial and other information. Numerous others from the Office of the EVP and Treasurer provided decision support that enabled the task force's initial success. In addition, we conducted a careful self-study of our operations against the accreditation standards of the New England Association of Schools and Colleges (NEASC) and documented this as part of the Institute's self-assessment report for the 2009 accreditation review.

Against the backdrop of the global financial crisis, important work continues on a substantial capital program of building construction, renovation and renewals, and on planning for financing and supporting the next generation of programs and services to enable the Institute's academic and research mission. In collaboration with academic leadership, we have launched the first steps in comprehensive physical planning for the campus and are completing \$800 million of campus development and renewal projects.

Sustainability efforts include expanding the portfolio of investments to reduce energy consumption, such as lighting retrofits, designing new buildings to Leadership in Energy and Environmental Design (LEED) certification standards, encouraging the use of public transportation through new commuter option programs, and using

green cleaning supplies. We have also continued to improve our advance emergency preparedness and communications protocols and to promote continuous improvement in campus health and safety behaviors.

In September 2008, it was announced that the Broad Institute would become an independent entity effective July 1, 2009, but would continue its close relationship and collaboration with MIT. Significant time was spent engaging in careful planning for a smooth transition. In support of this transition, all administrative areas devoted considerable time and effort into separating their activities, processes, and systems. In addition, various groups are continuing to support Broad under a service agreement as it ramps up its administrative organization.

### **Financial Highlights**

At the beginning of AY2009, MIT had the sixth-largest university endowment in the nation, valued at \$10.1 billion. MIT's endowment had more than doubled in value in the past decade as a result of growth in the investment markets and extensive fundraising. These increases supported an expansive capital investment program that added about two million gross square feet (GSF) to the campus and renovated an additional one million GSF over the past decade. These resources also enabled new programs and the deployment of new software and networking enhancement Institute-wide to support MIT's mission and activities.

Financial-planning capabilities for AY2009 were strengthened as a result of the creation of a comprehensive and transparent financial framework that is used to clarify the range of resources available to support the Institute's mission and to focus the use of these resources through an integrated prioritization of initiatives. As part of the financial framework, a base-case financial plan was developed to guide the AY2009 budget and future budgets. The base case included a balanced budget, a provision for future financial flexibility, a one percent general operating contingency reserve, and funding for specific initiatives approved by the provost.

The financial framework was designed to be transparent, with support for operations growing in line with inflation. Key risks to the base case include endowment returns, economic conditions, inflation, competition, and changes in the Institute's ability to recover indirect costs of research from federal sponsors. Sensitivities are modeled from the base case to measure the impact of these key risks.

The precipitous decline of global financial markets in AY2009 affected even the most diversified portfolios, including MIT's investments. MIT estimates that the endowment declined in value by approximately 25% from June 30 to December 31, 2008.

The Institute is planning for a protracted period of financial constraint and for fulfilling its mission in a future in which the economy may improve or worsen. After doing extensive financial modeling, MIT concluded that the community should plan for reducing the \$1 billion general Institute budget by \$150 million (15%) within two or three years.

Carefully analyzing and forecasting cash flows became a critical area of importance in AY2009 requiring significant leadership and focus. The Office of the EVP and Treasurer worked collaboratively with the MIT Investment Company (MITIMCo) to develop analytics to monitor MIT's liquidity. The result is improved understanding of the sources and uses of MIT's financial resources to assure our stability and to aid in decision making. Financing was put in place to complete our major capital projects and other Institute funding needs. Two tax-exempt bond issuances were completed in AY2009, a \$325 million issuance in August 2008 and \$266 million in December 2008. MIT continues to be one of only a small number of private research universities whose bonds are rated AAA.

The financial flexibility that was built into the AY2009 operating budget allowed the Institute to take a measured approach to the radically altered economic climate and navigate through the turmoil and uncertainty from a position of strength. MIT was not forced into making immediate midcourse operating-budget adjustments in AY2009. This allowed time for departments across the Institute to carefully review their resources and plan for AY2010 and beyond.

As a first step, the AY2010 budget has been reduced by \$50 million across all units, and decisions were made locally as to which line items would be reduced. The 2010 budget includes modest merit pool increases and endowment payouts flat with AY2009. Thanks to extraordinary work in every MIT unit, this budget objective has been put in place. When savings from the recently completed 2009 year are included, the Institute plans to have achieved over six percent in budget reductions by the end of fiscal year 2010.

Longer-term budget reductions require a more strategic and thoughtful approach. The Institute-wide Planning Task Force was launched in February 2009 to engage the community in developing ideas to achieve an additional \$50–\$100 million budget reduction for FY2011 and beyond. MIT is confident that this approach will generate the best ideas to help the Institute adapt to reduced financial resources while preserving and improving its core activities.

Irrespective of budget effects, the task force has identified a broad range of initiatives to secure MIT's preeminent position.

### **Vice President for Finance**

The Office of the Vice President for Finance (VPF) began FY2009 with an expressed goal of “delivering the 2011 experience today” — a conceptual framework for achieving operational excellence befitting MIT's 150th anniversary in 2011. The financial challenge accelerated efforts already in place to modernize and optimize processes, to build productive partnerships across the Institute and with our vendors, to rework the organizational structure to better serve the community, and to foster a culture of transparency, collaboration, and innovation. Work in each of these areas is geared not only toward achieving efficiencies and cost savings but also toward shaping a new, innovative mode in support of MIT's mission.

AY2009 saw two major steps toward the 2011 experience: a project aimed at modernizing the MIT travel system and a broad-based effort to optimize payroll functions. Each

initiative entailed significant collaboration with stakeholders across the Institute and each is slated to yield greater process efficiencies and major improvements in service to the community. The travel project will transform the way MIT faculty, staff, and students travel, with the adoption of a travel credit card and an online expense reporting system. Payroll evolved into a reshaped entity, HR/Payroll, with the hiring of a new director, Gerry O'Toole, and with stronger organizational connections to Human Resources (HR) and Information Services and Technology (IS&T) and a redoubling of efforts to stabilize and strengthen the payroll function.

VPF also initiated a major change in how the Institute purchases products and services. Procurement and travel operations were merged under a new sourcing umbrella, led by a new director of sourcing, Leo McInerney. The ambitious goal of this move is to transition travel and procurement from transactional to strategic areas, focusing on optimizing the MIT supply chain and making full use of MIT's buying power.

VPF also appointed a new director of Budget, Finance, and Treasury, Allen Marcum, an alumnus of MIT's Sloan School of Management, just in time for the beginning of the global financial crisis.

### **Facilities Planning, Engineering, and Construction (Capital Projects)**

The Institute engaged in a substantial capital program through the construction of new buildings and the renovation of existing facilities. Four new buildings either completed in or under construction in AY2009 will add one million gross square feet (GSF) to the campus, representing about a 9% increase to the campus.

NW35, a 256,000-GSF and 548-bed graduate residence hall at the corner of Albany and Pacific streets, was completed in time for the 2008–2009 academic year.

Construction continues on three major projects, all of which are on schedule and either on or under budget:

- E14, the new extension of the Media Lab and the School of Architecture and Planning, at the corner of Ames and Amherst streets, adds 168,000 GSF.
- E62, the new Sloan building between Main Street and Building E52, adds 217,000 GSF and a 430-car, three-level underground parking garage.
- Building 76, the new Koch Institute for Integrative Cancer Research, is a 357,000-GSF building adjacent to Building 68 and the Stata Center.

E62 and Building 76 will be the most energy-efficient buildings on campus.

AY2009 was the fourth year of a five-year capital renewal initiative that had allocated \$80 million for projects through June 30, 2009. As of that date, 55 capital renewal projects totaling \$57.3 million have been completed, with approximately half of these funds being spent in AY2009. Management actions, including a team focus on project delivery, dedicated staffing, and improved program and project tracking, drove the significant progress in completing these projects in AY2009. There are currently 80 capital renewal projects in planning or construction.

The campus is very engaged in energy conservation, and many good ideas to reduce our carbon footprint and save money have been identified and tested, including a number that are both practical and able to generate immediate, sustainable, and measurable savings. These include data-based commissioning of existing buildings and improvements to systems including lighting, ventilation, chilled water, steam, utility generation, and building management. Pilot projects deployed \$500,000 of EVP and Treasurer discretionary funds from AY2008. Successful outcomes attracted two alumni donor gifts totaling \$1.5 million in AY2009, allowing us to expand the portfolio of carefully designed investments in campus energy initiatives. We are targeting high return, rapid payback projects in buildings with high energy consumption patterns.

We have also facilitated the first steps in comprehensive physical planning for the campus (Vision 2030), in concert with the deans' and provost's academic visioning work. This work builds on campus facility workstream projects that were started in AY2008. Vision 2030 will analyze trends, integrate the long-term visions of the schools and departments, and develop a possible future representation of the physical campus of MIT. We also launched a study of the technical capacity of the main group to help us evaluate options for renewing this iconic structure for use in its second century.

### **Facilities Operations and Security**

The primary objective of Facilities Operations is good service to our customers. Based on feedback received from one-on-one interviews with customers, we created a "one-stop shopping" area: the customer care center. We also added a zone dedicated to serving the Division of Student Life to streamline its multiple points of coordination into a single zone.

Transportation needs for the Institute represent a significant source of energy use and greenhouse gas emissions. Gasoline prices surged to over \$4 a gallon early in AY2009, challenging many people's budgets. After listening to and learning from the community in combination with a detailed examination of transportation management, Parking and Transportation introduced new commuter benefits to build on the wide range of flexible, environmentally friendly, and cost-effective options available to MIT commuters. Examples include increased commuter rail subsidies, a free trial transit pass for the month of September 2008 to employees who were full-time parkers, additional satellite parking options, a new private transit benefit, and bike commuter reimbursement benefits.

The community enthusiastically responded to the free transit pass offer, as evidenced by the fact that 708 drivers opted to participate, and in October 2008 79 people switched to transit. There was a 61% response rate (8,061 commuters) to the latest biannual transportation survey conducted in October 2008. The results confirmed a shift in commuter choices to more "green" alternatives.

### **Audit Division**

Audit Operations completed its 2009 audit plan that consisted of 40 internal audit/advisory engagements. Emphasis was on business process reviews (e.g., electronic data interchange, MIT Medical pharmacy operations), targeted reviews (e.g., procurement

card), and advisory reviews (e.g., capital construction projects, assistance within the administrative redesign of a research laboratory). Additionally, the Audit Division dedicated effort during the year to establishing an internal audit presence at Lincoln Laboratory with the support of Lincoln's chief operating officer and the executive vice president.

The Research Administration Compliance Program (RACP) completed 20 site visits (representing 22 percent of MIT's on-campus federal expenditures) to departments, labs, and centers (DLCs) during FY2009. Along with site visits, RACP also provided ongoing research administration compliance monitoring and support to DLCs on compliance issues.

In collaboration with IS&T, the Audit Division cosponsored the Program on Personally Identifiable Information. The purpose of this initiative was to examine and mitigate risk associated with Social Security information at MIT, and much progress has been made in meeting current and future state requirements.

### **Information Services and Technology**

Information Services and Technology initiated a process this year to review its organization, strategy, and vision. The outcome was an ongoing commitment to focus on core baseline services to enable the mission of the Institute.

IS&T is a large organization, with four operational groups and many accomplishments over the year. Key accomplishments included advances in data center capabilities, stability and improvements in HR/Payroll in collaboration with VPF and HR areas, enhancements in email and calendaring offerings, upgrades of the campus wireless network, and progress in identity services toward an authorization management system. Additionally, IS&T was a partner in many initiatives (e.g., MIT Alert, Program on Personally Identifiable Information) detailed in other departmental reports, often enabling or implementing such projects.

As with other organizations throughout the Institute, IS&T explored energy issues and ideas, in particular server virtualization. Additionally, over 250 general cost saving ideas were identified by an internal team. Next year IS&T will continue to analyze 15 key ideas for savings opportunities and potential impact.

After six years as vice president for information services and technology, Jerry Grochow has announced he will transition from his current role on September 1, 2009, and retire from MIT at the end of 2009. We are thankful for his contributions and commitment in serving his alma mater. The search for a new head of IS&T is under way and progressing well.

### **Human Resources**

The Human Resources Department continues to be an important resource, assisting managers and employees, especially during difficult economic conditions. The department provided broad support to the community as it faced workforce decisions.

HR continues to deliver and improve its core services. Within training, HR has responded to the community's request for more manager and employee development programs. Additionally, together with the Training Alignment Team (TAT), HR developed an integrated training program on sponsored research administration and payroll curriculum. HR also played an important role in designing and implementing the Diversity Congress, as well as facilitating an Institute-wide focus on a diverse and inclusive community. A sample of other achievements within HR includes redesign of the 401(k) platform for rollout in fall 2009, assistance/leadership to VPR in analyzing the new Payroll organizational structure, and providing ongoing support to faculty with the launch of performance development and faculty work/life websites and enhanced child-care support.

### **Environmental Health and Safety**

Environmental Health and Safety (EHS) continues to improve on health and safety programs across MIT. In particular, EHS made progress on programs such as inspection, control of hazardous energy sources, fall protection, and universal waste. New programs were also developed, including Integrated Pest Management and Controlled Substance programs. MIT reduced the cost and magnitude of hazardous waste generation and injury/illness incidence. EHS continues to collaborate closely with faculty to conduct research in a safe and uninterrupted manner and with Facilities to enhance the workforce and reduce injuries and illness.

EHS has led greening projects centered on energy management. It is managing MIT's efforts to implement behavior changes to reduce energy use. Improvements have also been realized with projects focused on developing lab design guidelines for significant energy savings and the Building 18 hood sash height project.

In partnership with the Emergency Management Office and IS&T, EHS led the effort to establish the MIT Alert system, a suite of tools/channels for emergency notification to the community. The goal next year is to enhance and refine this system and increase community participation in the program.

### **MIT Medical**

MIT Medical, in collaboration with EHS, led the H1N1 and pandemic/crisis planning this year. It will continue to focus on this important activity in the fall and winter, along with its core mission of providing medical and wellness services to the MIT community. The department provided 128,656 clinical visits to MIT community members in FY2009.

The department has made improvements in delivery of service and administrative activities, leveraging technology to enhance operations and patient care. For example, MIT Medical became a 100% electronic-medical-record organization, prescribed electronically 96% of the time, expanded usage of the Patient Online portal (where patients communicate securely with clinicians, review results, and so forth), and implemented fully digital imaging. The department received two key recognitions this year. First, the MIT Medical Diversity Committee's Steering Group received the MIT Excellence Award for Fostering Diversity and Inclusion. Second, the department

successfully achieved a three-year reaccreditation by the Joint Commission on the Accreditation of Healthcare Organizations.

### **Office of Major Agreements**

The new Office of Major Agreements supports MIT's global and local research and education programs and collaborations. This year the office provided assistance on new agreements with entities in Singapore, Portugal, and Korea and ongoing support with other major agreements, including King Fahd University of Petroleum and Minerals and the Singapore-MIT Alliance for Research and Technology. A key focus for next year is developing a plan for a possible high-performance computing center in collaboration with a consortium of Massachusetts universities.

### **Government and Community Relations**

This year, the local activities of the Office of Government and Community Relations (OGCR) included organizing community meetings in support of academic and MITIMCo building projects, providing political guidance on Institute-wide policy issues, responding to city council requests and hearings, and facilitating extensive community engagement, including hosting an open house for the Area IV neighborhood at the MIT Museum. In addition, office staff supported MIT president Susan Hockfield's regional engagements, notably by hosting an information technology breakfast for Governor Patrick, members of his cabinet, and technology CEOs. The OGCR staff facilitated visits of numerous members of Congress and federal officials, including Representative Edward Markey's appearance at the "Clean Power: Building a New Clean Energy Economy" forum, which also featured John Holdren, director of the Office of Science and Technology Policy, and Carol Browner, assistant to the president for energy and climate change.

**Theresa Stone**

**Executive Vice President and Treasurer**