



Effectiveness and Efficiency Report

E&E Projects Through January 2014

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Section 1: Introduction

“Every dollar we save is a dollar that can be re-invested in scholarships and in our academic core. Every dollar saved is a dollar that doesn't have to come from students and their families. This is a great accomplishment and whets our appetite for more.”¹

- Robert L. Caret, President, University of Massachusetts



Massachusetts has built a public university system that is a source of great pride for the citizens of the Commonwealth. UMass educates more than 76,000 students and employs more than 16,000 people. Nearly 80% of these students are Massachusetts residents and most will remain in Massachusetts after graduation. Nearly 260,000 UMass graduates live in Massachusetts. Applications and enrollment are up on all five campuses. UMass has an annual operating budget of \$3.0 billion for FY15 with research expenditures approaching \$600 million and has generated intellectual property earnings of \$35.3 million in 2013. It has a five-year capital plan estimated at over \$5 billion. The University's distance education program, UMass Online, has won national acclaim and generated \$65.2 million in revenue last year. UMass won its first Nobel Prize in 2006. An economic impact study shows that UMass is responsible for \$6.1 billion in economic activity in Massachusetts. UMass is a major state-wide institution with a strategic presence and impact in every region of the state and we are the top option for an affordable, high-quality research University for the citizens of Massachusetts.

While the University has experienced significant enrollment growth we have also seen a massive cost shift in how higher education is funded here in the Commonwealth and throughout the United States, where student charges have continually increased and state support per student declined. To put this in context, in FY08 State support accounted for approximately 59% of the education revenues for the University. In FY13 the relationship between tuition and fees versus State support has flipped in the opposite direction. This trend is of great concern and presents significant challenges for both students and the University.

The Commonwealth of Massachusetts has recently made public Higher Education funding a budget priority by investing in what is known as the 50/50 Plan. The key tenant of the 50/50 Plan is to have the State Appropriation cover 50% of the cost to educate a student while the student supports the remaining 50%. It is the responsibility of the University to keep the overall cost of education affordable while not compromising on quality so that the State can continue to invest in the plan and Massachusetts students can afford to attend. While certain costs continue to rise such as contractual obligations, inflation, and debt schedules associated with our continued investments in our capital program, the University has committed to examine business practices and implement meaningful, financially impactful improvements wherever possible.

As the State's public research university, we remain committed to spending our funds wisely while maintaining our commitment to quality. This annual report on the University's Efficiency & Effectiveness efforts continues a sustained effort toward increased accountability, transparency and efficiency for the University and demonstrates the focus on this effort at all levels of our organization. In order to preserve the mission of the University:

“To provide an affordable and accessible education of high quality and to conduct programs of research and public service that advance knowledge and improve the lives of the people of the Commonwealth, the nation, and the world.”

We must develop innovative ways to maximize available funding and preserve quality for our students, faculty and other stakeholders. Through the University wide E&E effort our goal is to redirect resources through savings achieved toward activities that will maintain and enhance the academic experience.

Section 2: Executive Summary of Savings and Cost Avoided

As the State’s public research university, we remain committed to spending our funds wisely while maintaining our commitment to quality. We continue to examine our business practices and implement meaningful, financially impactful improvements wherever possible. Even under the best fiscal conditions, the University takes its responsibility seriously for ensuring that both taxpayer and student dollars are used in the most efficient and effective manner. Many demands are upon the limited resources that fund the University and we take our responsibility of being good stewards of these limited resources seriously. The University also understands that along with fiscal responsibility we must demonstrate that we are driving efficiencies and improving quality everywhere for our students.

In FY13, the University, through its Board of Trustees created a permanent Task Force on Efficiencies and Effectiveness charged with ensuring that improving quality through more efficient and effective operations continues to be a priority for the University. The Task Force, along with the President’s Office and the campuses are working to promote a more standardized approach for cross campus coordination and oversight of the entire effort, track and report progress, and quantify the benefits to the University and its campuses.

University E&E Projects and Savings Estimates (\$ 000’s)

July 2014 Report	# Projects	Cost Savings	Cost Avoidance	Total Saving
University Purchasing Initiatives	20	\$10,740	\$20,870	\$31,610
Energy & Sustainability	33	\$13,375	\$58,455	\$71,830
IT Initiatives				
IT Procurement	18	\$1,116	\$3,118	\$4,234
UITS	44	\$3,788	\$24,744	\$28,532
Subtotal	115	\$29,019	\$107,187	\$136,206
Building Authority Initiatives	13	\$0	\$82,940	\$82,940
TOTAL	128	\$29,019	\$190,127	\$219,146

In order to ensure that the University’s E&E efforts are integrated at every level within the organization, several sub-groups have been organized to focus on specific areas of business and to bring subject matter experts from each of the campuses and the President’s Office together to drive efficiency initiatives and ultimately change our practices to be more efficient and effective. The working groups include:

- IT Steering Committee – Under the leadership of Chancellor Collins of the Medical School and the University’s Vice President and Chief Information Office Robert Solis, the IT Steering Committee meets quarterly with an aggressive agenda to identify E&E efforts from procuring IT goods and services to collaborating on system-wide efforts to developing a business strategy that improves customer service, improves operations and maximizes the use of technology to improve services University-wide.
- Strategic Energy Committee – Under the Leadership of Vice Chancellor for Administration and Finance Yestramski from the Lowell campus and the University’s Chief Procurement Officer John Healey, the Energy Committee meets quarterly with the objectives of leveraging system-wide volume for energy procurements, sharing and implementing best practices and developing standards that measure and analyze building efficiency. In addition to the Strategic Energy Committee, the UMass Sustainability Committee, comprised of the campus Sustainability/Energy Managers and President’s Office Budget Staff has been meeting quarterly to discuss Sustainability/Energy Management topics ranging from clean energy and efficiency, to the

reduction of greenhouse gas emissions as well as: waste reduction, water conservation, green buildings, alternative fuels, efficient transportation, and recycling.

- Purchasing Council – Under the Leadership of Chancellor Motley from the Boston campus and the University’s Chief Procurement Officer John Healey, the Purchasing Council meets monthly and utilizes data to identify opportunities to leverage the University’s economies of scale. The Council evaluates whether common vendors are used on separately negotiated contracts, where common spending occurs using diverse vendors and where automation of processes may drive efficiency.
- Academic Efficiencies & Effectiveness – Under the leadership of President Caret, Senior Vice President Williams and Chancellor Grossman, the Academic E&E group meets quarterly to evaluate campus practices around degree requirements, practices that promote productive and timely degree completion, curricular redesign and options available to students that can reduce time to degree, expenses or both.
- UMass Building Authority (UMBA) – Under the leadership of Acting Executive Director Trisha Phillipone, UMBA has been aggressively working to implement best practices in borrowing by effectively managing borrowing schedules and plans and introducing more competition, a more diverse pool of project management, construction and legal teams, and bringing certain planning and legal activities in-house.
- Campus Working Groups - In addition to these working groups coordinated at the System level, each of the campuses is working to implement efficiency and effectiveness measures that are either specific to their campus needs or that may be used as a pilot that could later be implemented and benefit all of the campuses

In addition to the efforts of each of these groups to identify and implement E&E efforts both at the campus level and system-wide, the University has been working to ensure that a project inventory is maintained and that savings estimates are consistently calculated as to accurately reflect the financial impacts of our collective efforts. A database is currently being developed that will more efficiently track initiatives and allow for more timely updates to projects as well as to preserve information that can ultimately be used for informational and comparative purposes.

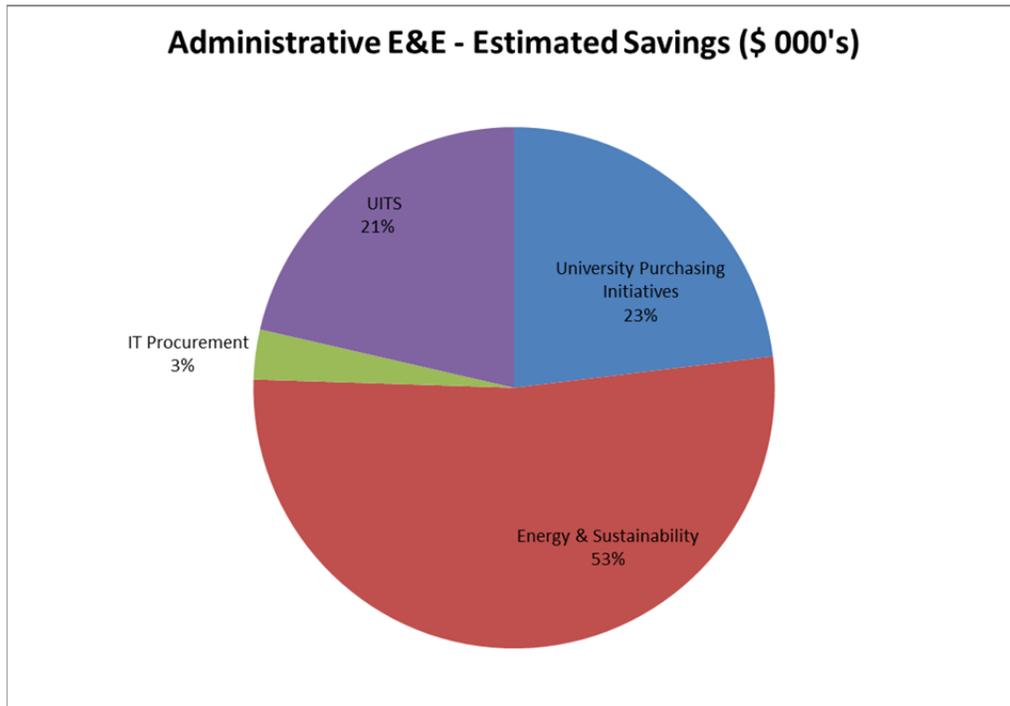
In order to ensure that cost savings are being appropriately estimated, the University has created two categories by which costs savings are evaluated. **Cost Reductions** represents the amount of actual savings due to the implementation of an initiative. This could be in the form of the newly negotiated contract compared to the old contract, value of employees that have been eliminated or some other amount that is a tangible savings compared to previous spend. It is usually only shown as savings for the first year of the implementation of an initiative even though the savings may last the life of a contract or even be permanent. **Costs Avoided** represents the amount of costs averted due to the implementation of an initiative. This savings is generally used to present the years beyond the first year savings of a contract or initiative, but may include the first year to the extent costs were averted that would otherwise have been spent.

In addition to the overall costs saved or avoided, the database reflects the estimated breakout of the cost reductions and savings by the fiscal year in which the savings will be recognized. The first year of savings typically represents actual cost saved for that year along with any avoided costs that have been specified. The out-years of a project typically reflect the costs avoided for the life of a contract. For those initiatives that are not contract driven, a period of 3 years is typically used to represent the savings even if the savings is permanent.

Through this coordinated effort, the University can ensure that the importance of these efforts is being properly communicated to the entire University and also ensure that we are consistently gathering and reporting information associated with our efforts.

Section 3: Administrative Effectiveness and Efficiency

The University is currently implementing 128 efficiency projects. Not including the 13 cost avoidance projects initiated by the UMass Building Authority, the total savings is projected to be approximately \$136.2 million for Administrative E&E efforts - an increase of \$43 million over the amount reported last year. These initiatives utilize the System Office to leverage the University's purchasing power, achieve economies of scale and create shared services in the areas of purchasing, energy and IT service delivery.



IT Steering Committee

The IT Steering Committee was created to guide in the efforts towards University-wide operational effectiveness; to provide a means for collaborative decision making and coordinated implementation in the pursuit of future strategic services and needs that are common to the campuses; to identify common services that can be provided effectively and efficiently through shared arrangements, ultimately reducing redundancy and costs; and to collectively prioritized efforts to focus on key initiatives. The IT Steering Committee is evaluating and implementing 62 projects with an estimated savings of \$32.8 million.

IT E&E Initiatives	# Projects	Cost Savings	Cost Avoidance	Total Savings
IT Purchasing	18	\$ 1,116	\$ 3,118	\$ 4,234
UITs Initiatives	44	\$ 3,788	\$ 24,744	\$ 28,532
TOTAL	62	\$ 4,904	\$ 27,862	\$ 32,766

Some examples of initiatives that are currently underway and have successfully yielded savings include:

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Mobile Device Optimization - A University Mobile Device Management Committee was established during the spring of 2012 to address the opportunity to deliver services in a more efficient manner, taking advantage of pooling of minutes across all campuses. The goal was to drive costs down without impacting service to the end user. A savings to the University has been estimated at \$1.8 million over 3 years with \$387,000 realized to date in cost reductions. In

addition, the UMass mobile device optimization project has been recognized by University Business Magazine as a Models of Efficiency award recipient. The story will appear in the April edition of UBM.

- **Data Center Optimization** – By reviewing the viability and needs of current campus centers along with the capabilities at the existing centers at the Amherst and Medical School campuses, a strategy for maximizing current resources and minimizing infrastructure redundancy is being developed. This project will implement a virtual cloud that shares computing resources, improves operations, realized on in-house subject matter experts and improves security. This project is estimated to avoid over \$5 million in costs over the next five years.
- **Microsoft Licensing** – All software licenses that are utilized by multiple campuses are being considered for contract consolidation for better pricing and more efficient billing. Since Microsoft products are most widely used across all campuses, a system wide contract has proven to be the most cost effective route. The consolidation of licenses is estimated to save \$110,000 through both cost avoidance and reductions.

In addition to those projects that are currently being implemented, the IT Steering Committee is also developing 9 new projects for future implementation which mainly include coordinated contracting efforts for IT goods and services utilized system wide.

	# Complete	\$ Complete	# Active	\$ Active	# Under Dev	\$ Under Dev	# Total	\$ Total
IT Purchasing	8	\$ 1,007	5	\$ 3,227	5	\$ -	18	\$ 4,234
University IT Initiatives	16	\$ 12,261	3	\$ 4,009	1	\$ -	20	\$ 16,270
Multiple Campus IT Initiatives	3	\$ 141	18	\$ 12,121	3	\$ -	24	\$ 12,262

Strategic Energy Committee & Sustainability Committee

A Strategic Energy Committee made up of the University System Office along with the five campuses was formed to engage in a full scope of energy services ranging from procurement, budgets, analysis, demand and various other special projects, in partnership with Competitive Energy Services (CES). Additionally, The UMass Sustainability Committee, has been meeting regularly to discuss Sustainability/Energy Management topics ranging from clean energy and efficiency, to the reduction of greenhouse gas emissions as well as: waste reduction, water conservation, green buildings, alternative fuels, efficient transportation, and recycling. The group uses this collaboration to invite vendors and organizations to present on topics of common interest that will help create efficiencies in the areas of sustainable programs, data analysis and facility usage.

Energy Initiatives	# Projects	Cost Savings	Cost Avoidance	Total Savings
Energy & Sustainability	33	\$ 13,375	\$ 58,455	\$ 71,830

Some examples of initiatives that are currently underway and have successfully yielded savings include:

- **Solar Net Metering** - In FY13, this project began with a Solar Net Metering project which reduces the cost of power to our campuses and eventually the region through credit earned from contractual support of solar development. In addition to savings, this effort created internships at several companies to support the UMass student experience. Competitive Energy Services (CES) is an energy expert retained by the University who immediately identified Net Metering Credits as one of the most significant opportunities for savings across the UMass system. CES worked with the system office and the individual campuses to issue three RFPs for net metering credits. CES has finalized contracts for each campus for the individual solar projects that were selected from the RFP process. The University of Massachusetts System has realized savings to-date of approximately \$3.5 million and estimates that a total of \$48 million of costs will be avoided over the life of the contracts developed through this process which range from 20-30 years.

- **Electricity & Natural Gas** - The University has combined its campus needs for electricity and natural gas into a University wide bid process. For the electricity bid, the Boston, Dartmouth, Lowell and the Medical School campus signed contracts that went into effect in June of 2013 and will last for 3 years, saving \$1.2 million. For natural gas, all five campuses have worked through the bid process together and are working toward a new contract to begin in October of 2014.
- **Energy Efficient Installations** - Each of the campuses is completing its own array of energy efficient installations of products such as lighting, boilers, chillers, and photovoltaics among other products that will support their facilities and generate savings from the operation of their buildings. Estimated savings from such projects across all of the campuses is \$12 million.

While continuing to promote sustainability and behavior change, each campus has achieved notable success in the areas of waste reductions including the composting of over 1,400 tons of organic waste each year on the Amherst campus, 30,000 pounds of food and dinnerware waste composted per year at the Boston campus, pre-production food waste sent to a chicken farm for recycling in Dartmouth, single stream recycling in Lowell and e-recycling, construction recycling and dining operations waste reductions efforts at the Medical School.

Additionally, while each campus has made great strides in its attention to sustainability there continue to be opportunities to expand programs, share best practices, assess current practices and increase capacity. The working groups established to develop projects will continue to create new ideas and initiatives and seek engagement from the University’s leadership, students and staff.

While many of the initiatives underway have been recognized at the campus level, many grants and other forms of recognition have been awarded to our campuses. In 2014, the Amherst campus was named to the Princeton Review Green Honor Roll, Boston received the Corporation for National Service award as a 3 year grant to support the development of the Southeastern Massachusetts Time Exchange, Lowell was the first New England College to receive the Greenguard Certification and the Medical School was a finalist for the Second Nature Climate Leadership Award.

Purchasing Council

A University Procurement Council comprised of the senior procurement officer from each campus and chaired by the Senior Director of Enterprise Procurement was created to develop and implement system-wide procurement guidelines and strategies that support the University’s Board Policies and leverage the collective campus purchasing power in order to reduce costs and enhance efficiencies.

Purchasing Initiatives	# Projects	Cost Savings	Cost Avoidance	Total Savings
University Purchasing Initiatives	20	\$ 10,740	\$ 20,870	\$ 31,610

Some examples of initiatives that are currently underway and have successfully yielded savings include:

- **SciQuest (BuyWays) Project** - In July 2013, the University rolled out a new eProcurement system from SciQuest, which was branded UMass BuyWays. BuyWays is used for purchasing goods and services needed by the University and replaced the requisitioning and Purchase Order processes which had previously been performed in PeopleSoft. The BuyWays implementation was a 12 month project led by the system office with significant participation from all campuses. The project has improved the quality of service to users by providing an intuitive, ‘Amazon-like’ shopping experience for purchasing goods and services. Other benefits include (1) a reduction in maverick spend and Procard activity by directing users to University contracts and preferred vendors through the use of ‘Punch-out’ and ‘Hosted’ catalogs.(2) an increase in the use of electronic transactions for purchase orders and invoices, (3) takes advantage of early payments discounts, made possible by a more efficient invoicing process and (4) captures detailed, item



level spend activity by campus to improve spend analysis capabilities and strategic sourcing efforts. To date, the project has saved the University \$1.6 million and is expected to save \$16.6 million in savings and avoided costs over the 8 year life of the contract.

- **Office Supplies Contract** - The University System recently completed a public bid process for office supplies for all 5 campuses and the President’s Office. The bids received were very competitive and have resulted in the University selecting Office Max as the most advantageous bid received based on pricing, user features, and other functionality. Based on the new contract, the University System will save approximately \$1,200,000 annually over 3 years from this while reducing suppliers and standardizing purchases.
- **Travel Program** - The University implemented a University-wide Travel Program in order to facilitate University-related travel in the most efficient and cost effective manner. The goals of the program include providing University travelers the highest level of customer service support and reducing University travel costs. The new program consolidates the travel ticketing process by offering two travel agency options: (1) an on-line self-booking option through Egencia (corporate version of Expedia); and (2) a more traditional live booking agency. The benefits available to University travelers by streamlining University business travel reservations through these two agencies include leveraging the lowest available airline, hotel, auto rental, and rail service discounts and ensuring that University employees traveling on business internationally are aware of University sponsored programs should emergency services be required. The Travel Program is projected to save the University \$480,000 annually.

In addition to those projects that are currently being implemented, the Purchasing Council is also developing 5 new projects for future implementation, including contracts for goods and services such as furniture, waste management ,temporary help services, lighting, and overnight mail service.

	# Complete	\$ Complete	# Active	\$ Active	# Under Dev	\$ Under Dev	# Total	\$ Total
University Purchasing Initiatives	10	\$ 5,410	5	\$ 26,200	5	\$ -	20	\$ 31,610

Section 4: Academic Effectiveness and Efficiency

With increased attention to and focus on accountability measures to ensure that institutions are effective--from marketing to timely student matriculation, a group that focuses on Academic E&E efforts has been created. A review of ERIC (Education Research Information Clearinghouse) provides ample evidence of thousands of documents on this topic written over several decades. Key elements of academic efficiency are captured in an observation made in a 1981 Marzano and Hutchins article: “Academic efficiency is defined as the extent to which a school utilizes its time for the academic development of all its students. The measure of academic efficiency must include three elements: time, students, and academic development.” General Academic E & E areas include:

- Enrollment management and capacity issues
- Faculty credit hour production
- Academic policies
- Enrollment services
- Academic and Administrative ratios as related to the academic core
- Efficiency and productivity efforts via the use of technology

Examples of Academic E&E efforts that are currently underway and are designed to make more efficient such things as time to degree, cost of degree, program/curricular structure, and its delivery include:

- ***Curricular Re-Design Symposium*** – This initiative provided subject matter expert presentations on topics ranging from team-based learning to learner centered integrated curriculum to implementation of blended learning.
- ***Online and Blended Learning*** – This initiative explores how instructional technologies play a central role in the student learning experience. The initiative was a joint venture with Dean Jen Riley, the current Zuckerberg Chair, and UMassOnline.

Additionally, efforts through UMassOnline are offering 6-week courses at various times of the year. There is also an increase on at least three of the campuses of summer offerings and enrollments.

Section 5: UMass Building Authority (UMBA) Efficiencies

The UMass Building Authority holds a unique position in the University as the central entity able to borrow on behalf of the campuses for capital projects as well as managing large scale capital projects using professional staff and contractors that implement best practices and consistency while meeting the specific needs of each campus. UMBA has implemented several initiatives in order to avoid borrowing costs and to more effectively manage the organization.

	# Projects	Cost Savings	Cost Avoidance	Total Savings
Building Authority Initiatives	13	\$ -	\$ 82,940	\$ 82,940

UMBA ensures that both our debt service and management of the use of debt are effectively managed and benefit from the University’s borrowing power, bond rating and all available resources. Examples of projects that have resulted from the effective management of the University’s debt include:

- **Interest Rate Savings** - The Project Revenue Bonds, Senior Series 2013-1 (Tax Exempt) and 2013-2 (Federally Taxable) had a 3.87% total cost of financing, producing a total debt service \$51.8 million lower than the originally anticipated 4.3% total cost of financing budgeted in FY13.
- **Just In Time Borrowing** - By using the commercial paper program, the campuses will pay less interest costs during construction since all the funds are not borrowed at the start of the project. As a result this approach saved the University nearly \$20 million in avoided interest costs over 3 years by mitigating capitalized interest at higher rates during the entire construction period.
- **Best and Final Offer Approach** - UMBA saved almost \$600,000 on interest on our liquidity facility replacement based upon a strategic decision to force bidders into a Best and Final Offer bid once original bids had been received. Approximately half of the liquidity facilities which backstop the swap portfolio were expiring on April 23, 2013. On January 23, 2013, UMBA sent out an RFP for bids for the replacement of these facilities in an unstable liquidity market where early price views had estimated the cost of these facilities would double or triple from our expiring rates.
- **BAFO Approach on Commercial Paper Liquidity** - UMBA was able to save approximately \$540,000 by requesting Best and Final Offers from the remaining participating RFP banks for the liquidity required to backstop our \$200M Commercial Paper program by asking the four lowest respondents to refresh their bids for a second time in conjunction with the \$200 million Commercial Paper Program, and added Bank of New York Mellon who also provided a very competitive bid.
- **Owner Controller Insurance Program (OCIP)** - OCIP 1 will save the Building Authority an estimated \$10M in savings on 10 projects worth \$1 billion. Counsel has opined that the OCIP program run by the Building Authority may legally expand. The Building Authority is investigating doing another OCIP for another aggregation of projects to come.

In addition to efficient management of the debt and debt issuance, UMBA has worked to introduce more competition, a more diverse pool of project management, construction and legal teams, and bringing certain planning and legal activities in-house which has resulted in better outcomes overall.

- **Strategic Procurement of Construction Teams** - Early selection of Construction Management firms has enabled design elements to be evaluated for constructability. Having all project team members, Owner’s Project Managers, Architects, Construction Managers, and Commissioning

Agents, hired early on in the design process enables high-quality projects to be completed in an expeditious manner. With UMBA financing \$1.7 billion of projects over the current FY13-17 planning period, reducing project schedules by 20% will lead to \$102 million of savings with the conservative assumption that construction costs are increasing by 5% annually.

- **Procurements for Services** – In addition to procurement for construction teams, UMBA has initiated several procurements for other critical services including:
 - Investment Banking Pool - UMBA did the first RFP for Investment Banks since 2006. This has resulted in a diverse pool of investment banks willing to come up with the best ideas and offer unique services to UMBA.
 - Financial Advisor - UMBA did the first RFP for Financial Advisory services since 2006, which has resulted in better pricing and services for UMBA.
 - Legal Services - UMBA has a more competitive and diverse prequalified pool of lawyers than ever before.
 - Real Estate Services - UMBA did an RFP to prequalify vendors for appraisal services, surveying, environmental, land use, relocation and other real estate services which will streamline much of the real estate development and purchase timelines.
- **Procurements for Design / Construction Services** - The procurement of all construction contracting services (OPMs, designer, CM, commissioning) and all other consulting services required by UMBA is now being managed centrally and internally by UMBA legal staff in conjunction with UMBA Director of Capital Projects. Historically, this process was managed primarily by outside OPM and attorney. This includes the advertising and posting of all notifications on Comm-Pass, the central register and the UMBA website. RFPs for OPM services have been initiated on a project-specific basis, leading to greater competition and diversity in project management services for UMBA projects. The qualifications required for OPMs has also been revised to balance the required experience in public construction but expand beyond "university-only" project experience to encourage firms with public experience gained from working with other public owners to compete for UMBA projects. OPM procurement has also been revised to require firms to have on their team's specific experience relative to the project (i.e. academic planner, food service) and cost estimating. The procurement of design services is also being revised to require designers who will "design to budget" and provide greater reconciliation of cost estimates during the programming and design phases of the project. Similarly, the CM procurement process and contracting has been updated to require greater transparency and accountability. UMBA has renewed internal emphasis on program development and scope definition for projects which allows for capital investments to be directed most efficiently.

In addition to the efficiencies described above that have resulted in millions in cost avoidance for the University, UMBA has implemented many process improvements that general operational efficiencies for the organization in general which include:

- **Expedited Contract Execution** - Upon selection of contractors or consultants for the Authority, UMBA legal staff has initiated an expedited contract execution and notice to proceed process to avoid work progressing without appropriate contracts in place.
- **Contract Limits** - Eliminated blanket contracts with Owner's Project Managers that formerly included automatic annual increases not based upon performance.
- **OPF RFP's** - Increased level of competition has held costs down and ensured that the top teams for each OPM have been competitively assigned to UMBA projects. This has also resulted in UMBA availing ourselves of the best practices in the construction management industry.
- **Streamlined Real Estate Acquisition Process** - Over the last several months UMBA legal staff has worked with the Lowell campus to streamline the process for acquisition of target

properties. UMBA legal and Lowell planning staff now have bi-weekly conference calls with action items developed for each to advance the acquisition process and prepare property information for review by the UMBA real estate committee and UMBA board.

- ***MBE/WBE, PLA and Workforce Compliance*** – UMBA Legal team is now overseeing the compliance efforts with the project labor agreement at the Boston campus as well as all other UMBA projects for all campuses. Having this review and reporting internally has helped ensure that UMBA is meeting goals and building relationships and partnerships in the industry. It has also fostered confidence in UMBA's commitment to the goals as not just "lip service" in contract documents, but as a priority for its projects.
- ***Timely and Effective Responses to Public Records Requests*** - The management of public records requests to UMBA has been centralized and streamlined. As requests come in relative to UMBA projects or business they are logged and response letters are sent within the required 10 period providing an estimate of costs associated for production and request for payment in advance. UMBA legal staff works with OPM or consultants, as applicable, to obtain responsive documents internally and have ready for production upon receipt of payment. Where a large volume of documents requested, documents are produced in electronic format. A log of all activities relative to public records request is kept in order to track responses and types of information requested.

Section 6: Participation in Consortiums

In addition to University negotiated contracts, the Procurement Council utilizes contracts negotiated by the Operational Services Division (OSD) of the State of Massachusetts and Group Purchasing Organization's (GPO's) to maximize cost savings and leverage enhanced service levels. The primary GPO's utilized are:

- **Massachusetts Higher Education Consortium** - MHEC membership is available to all not for profit public and private institutions of higher education, municipalities including elementary, secondary schools, technical, vocational and charter school as well as other educational organizations throughout Massachusetts, Maine, Vermont, New Hampshire, Rhode Island and Connecticut. We have been helping our members since 1977 to achieve cost savings and administrative efficiencies by aggregating spend volume to negotiate highly competitive contracts.
- **E & I Cooperative Services** - E&I Cooperative Services is the not-for-profit buying cooperative established in 1934 by members of the National Association of Educational Procurement (NAEP) to provide goods and services to members at the best possible value. The Cooperative is owned by its membership of nearly 3,000 colleges, universities, K-12, hospitals, medical research institutions and hospital purchasing organizations located throughout the United States.
- **Medical Academic Scientific Community Organization (MASCO)** - MASCO is a non-profit organization dedicated to enhancing Boston's Longwood Medical and Academic area (LMA) for the benefit of those who live, work, study or receive care in the area. MASCO's mission is to pursue programs that promote a sense of community among its members and to deliver services that are more efficiently developed collaboratively
- **US Communities** - U.S. Communities was founded in 1996 as a partnership between the Association of School Business Officials, the National Association of Counties, the National Institute of Governmental Purchasing, the National League of Cities and the United States Conference of Mayors. U.S. Communities is the leading national government purchasing cooperative, providing world class government procurement resources and solutions to local and state government agencies, school districts (K-12), higher education institutes, and nonprofits looking for the best overall supplier government pricing.
- **Med Assets** - MedAssets is at the center of improving the quality and effectiveness of the healthcare industry. From establishing best practice value for clinical and labor resources to supply pricing and procurement processes to reimbursement accuracy to payor contract management and modeling—our solutions, industry experts and data-driven methodologies are helping healthcare enterprises make informed changes to drive total cost reduction, financial optimization, clinical delivery alignment and efficiency

Section 7: Things the State Can Do to Help Us Be More Efficient

The University relies on the State as a partner in maintaining and sustaining our mission to provide an affordable, high quality education. The success of UMass could not be more closely tied to the success of the Commonwealth as UMass is an almost \$3 billion enterprise, our spending and investments account for just under \$5 billion of economic activity in the state annually and were present an unprecedented return on the state's investment. Through this partnership, the University is not only responsible for ensuring that the State's and Student's dollars are utilized in the most efficient and effective manner but also for identifying areas where the State can provide even greater support for the University's E&E program through the implantation of certain initiatives that will have a direct impact on the operations of the University.

We continue to work with our State partners to continue or advance the initiatives highlighted below and are thankful for the support that the State has provided UMass through the commitment toward the 50/50 funding model and FY14 and their initiative around the Higher Education Finance Commission to identify efficiency initiatives, best practices and funding sources that can be utilized in support of the University's mission.

Tuition Retention

Through the FY15 budget process, the University has requested a proposal allowing for full tuition retention by the University. This efficiency was first suggested nearly 24 years ago by the Saxon Commission and would allow the University to join nearly every other state in the nation by giving the public university the authority to retain tuition versus remitting it back to the State. The proposal is also an important step toward making the University more transparent to our students and their families by allowing them to see student charges in a way that alleviates much of the confusion that currently exists between tuition and mandatory fees. This proposal is also in line with President Obama's call to make Higher Education more transparent and is consistent with the Patrick's Administration's proposal for increased transparency across State government.

This proposal has no additional cost to the Commonwealth's budget as the State appropriation to the University would be reduced to account for the additional revenue being retained by the University. This proposal also compliments the 50/50 funding model by ensuring that all tuition and fees along with the State appropriation will be fully supporting the cost of educating a student.

A simple bill would be given to students and parents that more accurately reflects the cost of education and separate out what is tuition, the cost of core education services, versus fees paid on other services such as, housing, food, health care, certain programs, etc. that should be fee based. The bill would also show in state students and parents the discount they receive through the legislature and Governor's commitment to public higher education.

Although this was not supported by the Legislature in the FY15 budget, the University will continue to advocate for this important efficiency for the University.

901 Financial Reporting

Because the MMARS accounting system is not the accounting system for the University, specific reporting from the University to the Commonwealth is statutorily required to ensure that the State has the information it needs to publish its Statutory Basis Financial Report. The required reporting causes a significant administrative burden to report from the University accounting system into the MMARS system. On the other hand, the University has and will continue to follow generally accepted accounting principles in producing annual financial statements which provide the exact same information which the State Comptroller requires for the annual Statutory Basis Financial Reports. This type of duplicative reporting requirement is the type of change we would like to implement to be able to more efficiently use our limited resources in the most productive manner.

Legislation is currently pending (House Bill 1064) that would eliminate the so-called 901 reporting while not compromising the reporting of this important financial information to the State.

Disaster Recovery Funds

Since the University is partially funded by the State, when disasters occur that are declared by the Federal government, the application for reimbursement for costs must flow through the State's Emergency Management Agency (MEMA). In turn, all reimbursements for disaster related costs flow back through MEMA. For the traditional State Agency this flow of funds is appropriate as 100% of funding is supported by the State. However, in the case of the University only a portion is State supported and therefore when costs are incurred they should be reimbursed to the University as non-State revenues supported the costs incurred.

In response to the January 2011 Snowstorm (DR#1959), Tropical Storm Irene (DR#4028) and the October 2011 Snowstorm (DR#4051), several campuses (Amherst, Boston, Dartmouth and Lowell) incurred a total of \$504,245 in emergency related expenses. These storms were severe enough to qualify for federal disaster reimbursement funds for 75% of qualified expenditures totaling \$378,184. To date, the reimbursement from the January 2011 snowstorm was disbursed to the General Fund in April of 2012. The remaining reimbursements have not yet been dispersed and are currently with MEMA. The impacted campuses paid for these costs with campus funds which are generated through student fees and not with State appropriated funds as other State Agencies did. Therefore, the reimbursement of these costs should be appropriated back to the campuses for their costs incurred.

In addition to the less costly disaster related expenses described above, there are two significant disasters, Hurricane Sandy and the Boston Marathon bombing that required significant spending by the University and has been claimed to FEMA for reimbursement. If the University is not provided the reimbursement for these costs it will impact campus operations.

Allotment

The State appropriation for the University supports only a portion of the overall operations for the fiscal year. In an effort to maximize State funds, the University utilizes the appropriation solely for payroll purposes. Because State funding only covers a portion of the overall operations, it becomes an administrative burden to move employees from the State funding source to other funding sources between allotment periods. The allotment process is governed by MGL Chapter 29, Section 9B which states:

“Section 9B. Any monies made available by appropriation to state agencies under the control of the governor or a secretary, but not including the courts, the office of the governor and the office of the lieutenant governor, shall be expended only in such amounts as may be allotted as provided in this section. The secretary of administration and finance shall allot to each such state agency the amount which it may expend for each month out of the sums made available to it by appropriation or otherwise, taking into account the programmatic needs of the program supported by the appropriation and the cash-flow needs of the commonwealth.”

In FY14, the State granted a full allotment to the University as of November which allowed for the streamlining of payroll and the more efficient use of our resources. Initially, the State was concerned that spending would occur more rapidly and impact State cash flow however this was not the case and cash flow was not impacted. To continue this efficiency for our campuses, it is hoped that a full allotment of the State Appropriation will be granted at the beginning of FY15.

Section 8: Conclusion and Next Steps

Our fiscal responsibilities spur innovative efficiencies. As the State's public research university, we remain committed to spending our funds wisely while maintaining our commitment to quality. The University of Massachusetts has seen enrollment increase by 8,000 students since FY10 to nearly 72,000 students across the system. We've experienced dramatic growth in research funding, while making major investments in our facilities. Meanwhile, the operating support per student in Massachusetts has remained relatively the same as it was 20 years ago.

Because of this dedicated E&E effort that the University has underway, significant savings has been achieved. However, our efforts must continue and new ideas and projects must be explored and added to these efforts to continue to demonstrate the University's stewardship of valuable resources and to keep costs affordable to our students without compromising on quality.

Appendices

Previous Efforts Before 2011

While our efforts to achieve savings through greater efficiencies have been ratcheted up over the past two years, this is not a new initiative for the University. Since the economic downturn in 2008 the University has seen enrollment grow by nearly 8,400 student FTEs, research funding has increased and there have been major investments made to enhance our facilities. During this same period, the University took steps to reduce expenses by nearly \$68 million. Current efficiency efforts have resulted in additional savings of \$29 million and future savings of \$5 - \$8 million annually are expected based on initiatives currently underway. This does not include certain collective bargaining costs and other expenses that the University has been forced to absorb over this period of time. Highlights include:

- During the first two fiscal years of the recession, the University eliminated approximately 525 positions through layoffs, retirement and attrition.
- Additional reductions in part-time and overtime expenditures, energy/conservation measures and departmental budget cuts resulted in significant annualized savings of nearly \$51 million.
- As a result of the extensive financial planning efforts across the University, the campuses implemented additional reductions during FY11. Another 118 positions were eliminated or held vacant either through layoffs, attrition or retirements. The positions eliminated cut across the spectrum of University activity and resulted in additional savings of \$17 million.
- Recent efficiency strategies have realized a cost savings of approximately \$29 million annually, much of the savings achieved through purchasing, information technology initiatives and business process improvements.

Again, these efforts are being implemented (some over multiple years) simultaneously as University enrollment, research, and our facilities footprint are growing. Although critical positions have been eliminated, the campuses have made targeted investments and changed the way they do business permitting the University to operate more efficiently.

Better Financial Reporting and Monitoring

- Single Vendor File - the Amherst campus maintains the vendor file for the entire University.
- Implemented a Single Automated Travel & Expense system for University employees – these payments previously were processed through Accounts Payable as vouchers which generated checks. These payments are now processed via payroll by-weekly. This system also has full auditability as the approvals are all performed on-line with scanned receipts captured in the PeopleSoft system.
- Workspaces/SharePoint used for audit files – this allows access to documentation for all who are involved in the generation of the annual financial report and A-133 report of Federal funds.
- Single Chart of Accounts for the University – allows for system level reporting, monitoring of proper use, and single report development from PeopleSoft that can be run for each of the business units/campuses
- Single Fund structure for the University – allows for system level reporting, monitoring of proper use, and single report development from PeopleSoft that can be run for each of the business units/campuses
- New External Audit Contract – after 20 years with the same firm (Coopers & Lybrand/PricewaterhouseCoopers), switched to Grant Thornton which is a savings of approximately \$200,000 annually. Now includes Building Authority, UMass Foundation, and WCCC all under the same contract.

Innovative Approaches to Human Resource Management

- Employee Self-Service - employee self-service allows faculty and staff to manage much of their own Human Resources-related data without involving HR Department staff. Employee Self-

Service transactions include updating personal information, like address, phone number and emergency contact; payroll-related information like direct deposit (bank account) and tax withholding status; and training records.

- On-Line Time and Labor Entry/Approval - although under the larger scope of employee self-service, on-line time and entry/approval is a specific feature that eliminates paper timesheets, by allowing faculty and staff to record time (or exceptions) directly into the HCM system. Workflow tools also allow first line supervisors to approve entries directly in the system, eliminating the paper-based approval system.
- Enforcing Direct Deposit/Pay Advice Suppression - by tightening up the policy on live checks and pre-printed pay advices. Checks and pre-printed pay advices have been reduced by more than 85%, significantly reducing print and distribution costs.
- “Driving” Faculty and Staff to the HCM System - the above-listed items require faculty and staff to log onto the HCM system on a more regular basis. As a result, the system can be used for notifications—notably the required Ethics Commission Annual Notification of the Conflict of Interest Law. Using the system eliminated printing, distributing, and collecting and tracking acknowledgment of receipt notices.
- Centralizing the Annual Statement of Financial Interest Notification Process - centralizing the Annual Statement of Financial Interest notification process has eliminated campus HR staff time and increased consistency in the process.
- Centralizing Faculty and Staff Pre-Employment Background Screening - a system wide contract for pre-employment background screening reduced individual campus rates and added consistency in the process.
- Collective Bargaining Library - using existing technology, creating a central collective bargaining agreement library added efficiencies by allowing central and campus staff to research common issues across the bargaining units and eliminated the need for multiple printed copies.

Better Cash Management and Financial Operations

- Reduction in staff - Four positions were eliminated saving \$242,500 per year - positions have not been refilled
- Extended our Banking Services contract – Results in cost avoidance \$130,000/year compared to published studies of bank fees.
- Refunding of Bonds - certain WCCC and University Bonds were refunded generating net present value savings of approximately \$5.1 million.
- System wide Armored Car procurement – now pay approximately what we paid to service three campuses. In addition, Amherst was able to return two senior officers to campus patrol duties, eliminate the cost of the armed van and overtime to cover for senior officer’s days off operating their van service.
- Paymode – when program was implemented we had 1348 vendors in the program and we now we have 3313. Having vendors in the program eliminates the issuance of paper checks for those vendors, takes advantage of ACH technology to reduce payment expense and eliminates the cost of postage and escheat processing.
- Mandatory elimination of the printing of pay stubs - Costs perhaps captured in UITS materials but would include labor, paper and equipment costs and delivery.
- Revenue Credits program and lower cost share class - moved participants to the lowest share class and identified overcharges in the 403(b) programs – creates an expense charge for plan participants that is appropriate and saves participants money. The savings are small by participant however they add up across 4,000 participant accounts.
- The hourly cost of legal assistance associated with external review of Executive Compensation programs has been reduced by half as a result of a very productive RFP process.
- Consolidated purchasing associated with the University’s insurance programs has resulted in savings for the University and WCCC and is more efficient as it is managed through one central office.
- Eliminated certain bank accounts - specifically established to record the University’s credit card transactions resulted in annual savings of \$36,000/year.

- Automated the payroll deductions pay cycle and eliminated the associated paper checks, postage and turned a four day per month process for one individual in to a one day per month process. The distribution of those funds is also timelier.
- Implemented Commerce Manager - a third party platform which allows campuses to host credit card functionality in a secure and cost effective manner. This has helped to reduce the proliferation of third party software solutions intended to process credit card charges at the campuses.
- Centrally manage the annual PCI certification process - in addition to support in managing campus implementations of third party software. This central process has streamlined and focused our compliance efforts.
- Facilitated with the Connector Authority and DHE the purchase of student health insurance and scholars coverage - the program has resulted in generally better insurance coverage for these groups at competitive rates. Further consolidation amongst campuses is the next opportunity.
- Combined our General Liability and Limited Professional Liability coverage which produced initial savings of \$100,000.
- Locked in multi-year rates on certain insurance coverage and decreased the average annual premiums for those years.
- Manage in-house claims associated with General Liability incidents thus allowing the General Counsel's Office to focus on litigation and not administration matters.
- Manage the Private Use initiative through one person in Treasury - The ability to manage this centrally has allowed us to be efficient and move the project forward at all campuses on differing schedules.
- Eliminated the pre-note process thus eliminating the need to generate a paper check when an employee is first hired.
- Implemented two external vendor programs that allow international students to pay their tuition and fees electronically and in their own currency - this program has reduced bank fees we pay and improved the reconciliation process.
- Negotiated an AMEX rate of 2.2% for all campus vendors - AMEX had previously charged in excess of 3.0% to 4% at all campus locations that accepted the card.
- Enhanced Abandoned Property reporting with the campuses using Workspaces.
- Implemented the MBTA deduction through Benefit Strategies - this program improved customer service and streamlined the campus payroll deduction procedures and backlogs.
- Managing payments to foreign persons and companies has been an area of interest of the US Treasury. We manage this process centrally thus saving campuses time and energy with regards to compliance.
- Closed additional bank accounts and merged others in an effort to streamline reconciliations and save money.
- Changed the process to manage most of the Letter of Credit and wires business electronically via our use of mailboxes and other online technology - this has made the process more efficient and has reduced the time needed to process a payment.

APPENDIX - List of Projects

Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
Purchasing	Active	SciQuest Implementation	Create university wide market place for procurement of goods	\$ 6,000	\$ 10,600	\$ 16,600
Purchasing	Complete	Dorm Mattress Bid	3 campuses combined dorm mattress purchases for 3 year period.	\$ 30	\$ 60	\$ 90
Purchasing	Complete	Office Supplies-includes all five campuses and the System Office	University-wide contract w/ WB Mason for office supplies.		\$ 895	\$ 895
Purchasing	Active	Office Supplies-includes all five campuses and the System Office	University-wide contract w/ Office Max for office supplies.	\$ 1,200	\$ 4,800	\$ 6,000
Purchasing	Active	Athletics Advertsing	University-wide contract w/ office supply vendors for advertising.	\$ 1,500		\$ 1,500
Purchasing	Complete	Elevator Maintenance-includes 4 campuses: Lowell, Boston, Amherst, dartmouth	Otis Elevator awarded University-wide contract	\$ 650	\$ 1,250	\$ 1,900
Purchasing	Complete	Copier/Printer Maintenance-Program goal converst to single vendor, multi functionla devices. Aligh system for full bid process 2014	Xerox awarded system-wide agreement.		\$ 540	\$ 540
Purchasing	Complete	Lab Supplies- Bid two primary vendors. Contract awarded to Fisher.	Fisher Scientific awarded system-wide contract for lab supplies/distribution.	\$ 200	\$ 800	\$ 1,000
Purchasing	Complete	Lab Supplies- Bid two primary vendors. Contract awarded to Fisher.	Fisher Scientific awarded system-wide contract for lab supplies/distribution.	\$ 160	\$ 160	\$ 320
Purchasing	Complete	Electronic journals. Complete sytem wide agreement with Elsevier	System wide contract Completed with Elsevier		\$ 560	\$ 560
Purchasing	Active	Vehicle leasing- contract completed 8/13.	Replace existing campus owned vehicles with laesded vehicles			\$ -
Purchasing	Active	Travel services. Implement travel services to include travel agency, negotaited air, hotel, auto rental contracts	Implement managed travel program	\$ 1,000	\$ 1,100	\$ 2,100
Purchasing	Under Dev.	Lamps	Complete system wide contract for lamps, lighting			\$ -
Purchasing	Under Dev.	Waste stream management	Complete consulting contract to evaluate current waste streamm mangement practices across the university system, including solid, hazardous waste and recyuclying services			\$ -

APPENDIX - List of Projects

Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
Purchasing	Under Dev.	Temporary help services	Create university wide contract for temporary help services			\$ -
Purchasing	Complete	Executive search services	Pre-qualified list of vendors, fixed benefit offerings, ceiling pricing implemented		\$ 90	\$ 90
Purchasing	Complete	IT staff augmentation	Pre-qualified list of companies (suppliers). Agreed upon terms and conditions		\$ 15	\$ 15
Purchasing	Under Dev.	Dorm furniture-establish system wide contract	Complete system wide agreement for dorm furniture utilizing expertise of facility, resident life managers. Form user/evaluation committee			\$ -
Purchasing	Complete	Multi-year financial planning tool	Complete contract for software planning tool that allows consistency in financial planning across all campuses			\$ -
Purchasing	Under Dev.	Printing- review current printing practices across the university system and determine strategy to evaluate current practice vs. potential system wide outsource contract	Standardize vendor for letterhead, business cards			\$ -
Energy	Complete	Solar/Net Metering Contract	Reduction in energy spend through credit earned from contractual support of solar development.		\$ 1,100	\$ 1,100
Energy	Complete	Solar/Net Metering Contract	Reduction in energy spend through credit earned from contractual support of solar development.		\$ 10,405	\$ 10,405
Energy	Complete	Solar/Net Metering Contract	Reduction in energy spend through credit earned from contractual support of solar development.		\$ 16,000	\$ 16,000
Energy	Complete	Solar/Net Metering Contract	Reduction in energy spend through credit earned from contractual support of solar development.		\$ 19,000	\$ 19,000
Energy	Active	Electricity Bid	4 campus combined bid for electricity supply.		\$ 1,200	\$ 1,200
Energy	Active	System-wide bid process for natural gas supply.	System-wide bid process for natural gas supply.			\$ -
Energy	Complete	Natural gas procurement-bid process			\$ 685	\$ 685
Energy	Complete	Electricity Procurement-bid process		\$ 400	\$ 800	\$ 1,200
Energy	Complete	Solar - net metering			\$ 1,600	\$ 1,600

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Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
Energy	Complete	LNG Temporary Facility	Project implemented to decrease campus consumption of oil.	\$ 2,300		\$ 2,300
Energy	Complete	Energy conservation effort	Multi -faceted energy conservation program		\$ 2,400	\$ 2,400
Energy	Complete	Lighting Occupancy Sensors Library, Gorman Dorm Steam Line Replacement, CHP Gas Compressor Motor Eff. Upgrade, LED traffic Light Conversion, Rec. Center Chiller Controls, Retro commissioning Effort with Northeast Electric, and Rotovaporation Cooling Upgrade.	Annual energy reduction project	\$ 570	\$ 1,140	\$ 1,710
Energy	Complete	Gas turbine generator upgrade		\$ 1,425		\$ 1,425
Energy	Complete	Lamp replacement project	Repalcement of 1,700 T8 florescent lamps	\$ 159		\$ 159
Energy	Complete	Installation new boiler		\$ 165		\$ 165
Energy	Active	Energy performance project	\$40m energy performance project implemmneted by NORESO and managed through DCAM		\$ 1,600	\$ 1,600
Energy	Complete	Wind turbine project			\$ 125	\$ 125
Energy	Complete	Photovoltaic arrays installation	Installation on the Tripp Athletic Center	\$ 150		\$ 150
Energy	Complete	energy & natural gas procurement	Bid process and hedging startegy for electrcity and natural gas supply	\$ 226		\$ 226
Energy	Complete	Energy procurement	Bid process and hedging startegy for electrcity and natural gas supply	\$ 1,180		\$ 1,180
Energy	Complete	Energy efficiency projects	UMMS received \$8.5m in incentives from National Grid, resulting projects will generate \$6.8m future electric savings	\$ 6,800		\$ 6,800
Energy	Active	Hadley Horse Farm Solar PV	2 MW Solar PV Field. Combination Net Metering / Research Project.			\$ -
Energy	Active	Regional Anaerobic Digester	A DCAMM and MADEP effort to install a Regional Anaerobic Digester for the Amherst area on University property.			\$ -
Energy	Active	Install Energy Efficient Chiller - Weed	Remove Absorber and reduce GHGs and energy by replaing with Magnetic Levitation Chiller.			\$ -

APPENDIX - List of Projects

Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
Energy	Active	Install North Campus Boiler Plant	Deferred Maintenance/ Energy Project -installing 2 new dual fuel boilers, combustion controls and BAS, economizers, steam turbine BFP and Variable Speed BFPs. We will have capability to burn ULSD and Nat. Gas on all three boilers.			\$ -
Energy	Active	ICC BAS and update to new vav boxes	Update BAS to new DDC web based system			\$ -
Energy	complete	ICC fuel switch from electric to nat. gas heat	Replace older Rooftop makeup air unit using nat. gas instead of electric heat.			\$ -
Energy	complete	Steam trap reapiir and replacement program	Replace approx 200 traps in Coburn and Mahoney and additional areas on north campus.			\$ -
Energy	complete	Replace Zamboni Boilers, add VFDs to AHUs and retroCx HVAC units and controls	Reduce heat and electricity by improving energy efficiency			\$ -
Energy	complete	Add DDC conrols to Donahue, Sheehy	Add DDC BAS controls to three residence halls			\$ -
Energy	Active	Complete ETIC, HSSB, North Campus Garage	Two New LEED Constuction buildings plus a parking garage			\$ -
Energy	Active	Mutiple Lighting upgrades	Olney, Olsen, Ball, Univ. Ave Exterior			\$ -
Energy	Active	AEP	Total Campus AEP		\$ 2,400	\$ 2,400
IT Purchasing	Complete	Microsoft Licensing	Complete an RFP for Microsoft licensing through re-seller (MicroSoft does not deal directly). This would include all campuses for immediate contracting and Amherst rolling into contract when current campus expires 6/2013.	\$ 41	\$ 69	\$ 110
IT Purchasing	Complete	Apple System wide agreement	Work with Apple by and all campuses to create a University wide agreement that provides an enhanced level of dicounting and standadrd business terms	\$ 90	\$ -	\$ 90
IT Purchasing	Under Dev.	IBM (SPSS)	All campuses utilizing exception (Lowell, System Office). Goal is to increase access across the University while reducing cost per usage.	\$ -	\$ -	\$ -

APPENDIX - List of Projects

Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
IT Purchasing	Complete	Math Works (Mat Lab)	5 campuses utilizing software (no use System Office).	\$ -	\$ 13	\$ 13
IT Purchasing	Active	IT Reseller RFP	Issue RFP for University wide IT reseller services (exclusive of laptop/desktop, Microsoft and Adobe-products currently under contract)	\$ 64	\$ 256	\$ 320
IT Purchasing	Active	Anti Virus Software	Current campus contracts expire, evaluate university-wide contract.	\$ -	\$ -	\$ -
IT Purchasing	Active	Desktop & Laptop	Usave programs through Dell and Lenovo. Discounts range from 25% to 36% off standard configurations with non-standard at 28%. Savings analysis assumes 25% in the interest of conservatism.	\$ 300	\$ 600	\$ 900
IT Purchasing	Active	Adobe	Prepare for System wide bid process 2/13.	\$ 39	\$ 78	\$ 117
IT Purchasing	Active	Mobile device Optimization	Consolidate all existing University mobile devices into a shared/pooled minutes program with existing carriers: completed 5/13	\$ 528	\$ 1,362	\$ 1,890
IT Purchasing	Complete	Safari Books	Purchased subscription to online technical resource data provider for \$25K in an effort to reduce employee travel & training costs.	\$ -	\$ 15	\$ 15
IT Purchasing	Under Dev.	Entersys	Work with vendor to structure a system-wide contract that leverages combined buying power of the University. Secondary effort will focus on standardizing equipment where advantageous to do so.	\$ -	\$ -	\$ -
IT Purchasing	Complete	EMC	Work with vendor to structure a system-wide contract that leverages combined buying power of the University. Secondary effort will focus on standardizing equipment where advantageous to do so.	\$ 50	\$ 300	\$ 350

APPENDIX - List of Projects

Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
IT Purchasing	Under Dev.	IBM	Work with vendor to structure a system-wide contract that leverages combined buying power of the University. Secondary effort will focus on standardizing equipment where advantageous to do so.	\$ -	\$ -	\$ -
IT Purchasing	Under Dev.	Juniper	Work with vendor to structure a system-wide contract that leverages combined buying power of the University. Secondary effort will focus on standardizing equipment where advantageous to do so.	\$ -	\$ -	\$ -
IT Purchasing	Under Dev.	Fujitsu	Work with vendor to structure a system-wide contract that leverages combined buying power of the University. Secondary effort will focus on standardizing equipment where advantageous to do so.	\$ -	\$ -	\$ -
IT Purchasing	Complete	Atomic Learning	Training software currently being bid by A, B, D, L	\$ 4	\$ 35	\$ 39
IT Purchasing	Complete	Lecture Capture software (Echo360)	Standardize lecture capture software license across all campuses converting to a site license agreement	\$ -	\$ 390	\$ 390
IT Purchasing	Complete	Lenovo	2 extension of the Lenovo agreement with additional 3% discount on Lenovo equipment		\$ -	\$ -
UITs	Complete	9C Budget Re-Alignment - Personnel	Reduced 9 FTE's and contract employee positions related to redundant administrative & management staff.	\$ 1,500	\$ -	\$ 1,500
UITs	Complete	UITs Personnel Re-Organization	Eliminated 4 FTE's related to redundant management staff.	\$ 500	\$ -	\$ 500
UITs	Complete	9C Budget Re-Alignment - Non-Personnel	Elimination of historically high budget placeholders in Admin Expenses, Temp Help, Consulting & EE Train & Travel.	\$ 56	\$ -	\$ 56
UITs	Complete	Virtualization Strategy	Strategic shift to virtualized computer processing (racks & blades) versus traditional big box server approach.	\$ -	\$ 1,281	\$ 1,281

APPENDIX - List of Projects

Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
UITS	Complete	License & Maintenance Reductions - Ongoing	Reduction in HW/SW maintenance related to eliminated or reduced products including: small equipment purchases, Brigadoon, Temp Help, Cognos.	\$ 91		\$ 91
UITS	Complete	Oracle Licensing Re-Negotiation	Reduced Oracle license related to migration to more advantageous pricing metric.	\$ -	\$ 204	\$ 204
UITS	Complete	License & Maintenance Reductions - Ongoing	Reduction in HW/SW maintenance related to eliminated or reduced products including: Citrix, Retrofit, EIR, Oracle & Business Objects	\$ 150	\$ 300	\$ 450
UITS	Complete	CedarCrestone	Brought legs & regs consulting service in-house as part of upgrade functionality/approach.	\$ 72		\$ 72
UITS	Complete	Project Implementation Methodology - FIN9.1 Upgrade	Impact of moving towards in-house upgrade process vs. engaging external implementation partners	\$ -	\$ 4,934	\$ 4,934
UITS	Complete	Server/Storage Architecture	Change in server & storage architecture resulting in reduced hardware maintenance costs.	\$ -	\$ 1,130	\$ 1,130
UITS	Complete	License & Maintenance Reductions - Ongoing	Reduction in HW/SW maintenance related to eliminated or reduced products including: Xerox, EMC, Mobius, temp help	\$ 400		\$ 400
UITS	Active	Project Implementation Methodology - HCM 9.2 Upgrade	Impact of moving towards in-house upgrade process vs. engaging external implementation partners	\$ -	\$ 4,001	\$ 4,001
UITS	Active	Help Desk Migration to STAT	Migrate Help Desk ticketing system to STAT from Heat, a Front Range product, and eliminate annual Heat maintenance contract.	\$ 8		\$ 8
UITS	Complete	Lightspeed Maintenance	Network maintenance reduced by analyzing # of network elements and taking action to reduce, in addition to negotiated loyalty discount.	\$ 9	\$ 6	\$ 15
UITS	Complete	EMC Data Domain (Accunet)	Consolidation of storage backup functionality to Data Domain from both Avamar and Data Domain.	\$ 109	\$ 769	\$ 878

APPENDIX - List of Projects

Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
UITS	Complete	Integration Partners	Optical infrastructure HW and SW related to Umassnet rollout.	\$ -	\$ 300	\$ 300
UITS	Under Dev.	Automated Testing Tool	Development tool that automates code testing following software implementations, patches/fixes or upgrades.	\$ -	\$ -	\$ -
UITS	Complete	Open Position Elimination	Eliminated 4 open positions, 3 CAS and 1 ISIS.	\$ -	\$ 450	\$ 450
UITS	Active	Metrics & PPM Programs	The metrics and portfolio project mgt programs are efficiency and quality improvement focused. By measuring progress against various KPI's and improved project mgt techniques, it is expected that this will improve UITS's overall ability to deliver quality services in a time manner.	\$ -	\$ -	\$ -
UITS	Complete	Systems Administration Improvements: System Monitoring; EMC VPLEX Technology; Network Global Site Selection; Ticket System Consolidation.	System monitoring improvements leads to much less time identifying root cause of system and application issues with improved ability to identify issues before users are impacted. VPLEX technology allows for increased up time for users while systems concurrently being upgraded. Site selection works in conjunction with DR site to simplify user access to critical systems. Ticketing system migrated all work intake to single system greatly enhancing work flow and communications across the organization.			\$ -
UITS	Active	Cognos Transition & Mobius Retirement	Build SA dashboards Retire Mobius report system with XML Publisher, PeopleSoft Report Manager & Summit dashboards	\$ -	\$ 1,000	\$ 1,000

APPENDIX - List of Projects

Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
UTS	Active	Identity Management Update	Enhance security and auditing Continuation of Single Signon Ease of use and management Cost savings from above	\$ -	\$ 150	\$ 150
UTS	Under Dev.	Virtual Desktop Initiative (VDI)	Provides for file sharing across the desktop/laptop of common software packages served over the network/internet	0	0	\$ -
UTS	Active	Security Operations Center (SOC)	Implement and maintain, in accordance with Board policy, a comprehensive and proactive oriented information security program for the University spanning all campuses	\$ -	\$ 330	\$ 330
UTS	Active	Data Center Optimization	Create a UMass Data Center strategy by reviewing viability and needs of current campus data centers, assess future needs and leverage UMW Data Center and the new UMA Data Center for hosting and disaster recovery	\$ -	\$ 5,019	\$ 5,019
UTS	Active	UMassNet	Provide scalable, cost-effective reliable high-capacity networking connectivity between campuses to the Internet, Internet2 and MGHPC	\$ -	\$ -	\$ -
UTS	Active	New Applicant Tracking System	Implement a new applicant tracking system to improve and enrich information capture & access to information to enhance decision making and provide for a more competitive recruiting process	\$ 100		\$ 100
UTS	Active	Business Intelligence	Dashboard development and upgrade for SUMMIT (Financials, HR and Student Administration)	\$ -	\$ 90	\$ 90
UTS	Complete	UMOL Blackboard Learn9 LMS Implementation	Support UMOL campus migration from current Blackboard Vista LMS to Blackboard Learn9	\$ -	\$ -	\$ -

APPENDIX - List of Projects

Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
UITS	Active	International Office	Software application to integrate with the Student and Exchange Visitor Information System (SEVIS)	\$ -	\$ -	\$ -
UITS	Active	MGHPCC	Provide a state of the art, green Data Center to support the future of high performance computing needs for the University research community	\$ -	\$ 800	\$ 800
UITS	Active	Telepresence	Develop a reliable, cost-effective videoconferencing solution for fixed and mobile devices to enhance the student experience with guest lecturing, faculty virtual office hours and specialized intra-campus course offerings	\$ -	\$ 300	\$ 300
UITS	Active	Forms Automation - HR	Forms Automation will enable campuses to replace their existing employee personnel action paper forms with electronic forms and streamline the process	\$ -	\$ 2,800	\$ 2,800
UITS	Under Dev.	Mobile Computing	Enhancement of the student experience by providing utilities of information not currently accessible in one place such as bus tracking, campus maps, directories by building, news and push messages Efficient and timely access to PeopleSoft data Marketing tools (walking tours, alumni news, sports)	\$ -	\$ -	\$ -
UITS	Active	Virtual Computing Labs (VCL)	Provide a software solution that allows students, faculty and staff to reserve and use software any time and anywhere through a web browser	\$ -	\$ 570	\$ 570
UITS	Active	DTR Boston Data Center Move	UMSO must move its Disaster Recovery components from Boston to UMA as part of the Data Center Optimization plan	\$ -	\$ -	\$ -
UITS	Complete	Advancement Implementation	Implement Advancement system for UMB, UMD and UML Upgrade UMW to current version	\$ -	\$ -	\$ -

APPENDIX - List of Projects

Initiative Type	Status (Active, Complete, Under Dev.)	Title of Initiative	Description of Initiative	Cost Reduction	Cost Avoid.	Total Savings
UITS	Active	Document Imaging Program	Implement for Undergraduate Admissions	\$ 614		\$ 614
UITS	Active	Shared Services Portal Expansion	Tool to improve internal University communications	\$ -	\$ 10	\$ 10
UITS	Under Dev.	Student Success Outcomes	Allows campuses to better analyze and predict "at-risk" students Proactive measures can be utilized to assist student population and turn the risk into a success	\$ -	\$ -	\$ -
UITS	Complete	BoardVantage	Effort to migrate Board of Trustee documents to fully paperless environment.	\$ 141		\$ 141
UITS	Active	Terra Dotta Risk Management System	To provide a single University enterprise repository of initial information such as emergency contract and medical info for students, faculty & staff who travel domestically & abroad.	\$ -	\$ -	\$ -
UITS	Active	Terra Dotta Study Abroad System	To provide BDL Study Abroad offices with a web-based application where students, staff, faculty and parents will find the information on study abroad opportunities.	\$ -	\$ -	\$ -
UITS	Active	IT Staff Augmentation Bid	University-wide bid for IT staff augmentation services including pre-defined job families with not-to-exceed rates; early pay discounts; and volume hour discounts.	\$ 38	\$ 300	\$ 338
TOTAL				\$ 29,019	\$ 107,187	\$ 136,206