



Annual Administrative Efficiency & Effectiveness Report

A report of the University of Massachusetts
June 2016



University of Massachusetts
Amherst • Boston • Dartmouth • Lowell • Medical School • UMassOnline

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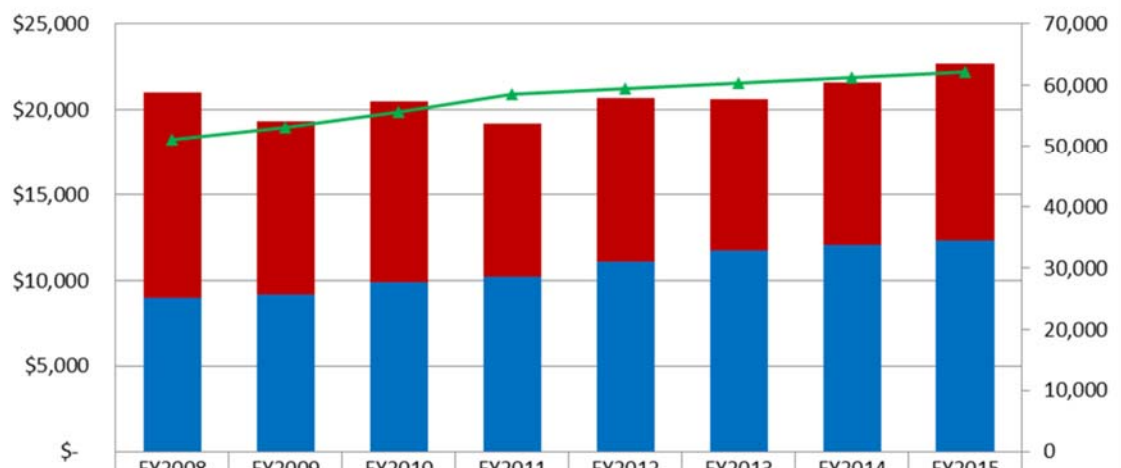
Section 1: Introduction ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

The University of Massachusetts Efficiency & Effectiveness (E&E) initiative serves as an ongoing opportunity for the University to review its operational practices and strategic priorities to continue its growth as a world-class research university. This E&E Report provides a detailed update to previous reports and outlines key aspects of University operations where future E&E efforts are being planned. The details of this report represent the new projects and initiatives undertaken between January 2015 to January 2016. This report should be viewed in consultation with the past University reports. References will be made throughout the document to previous reports, which provide clarifying details about past initiatives and history on the Task Force on Efficiencies and Effectiveness.

The 2015-2016 report highlights 129 projects totaling \$153.8 million in cost savings and avoidance over the life of the projects. This year, an additional 6 projects were added totaling \$9.3 million in projected savings over the life of their implementation. Projects under development are still in the process of determining savings estimates along with a variety of other steps to bring the projects on-line.

An overarching theme to our E&E efforts is our ability to save resources through realizing efficiencies translates into more resources made available for investments in research, teaching, and the overall student experience. Those key investments fuel the University’s strategic objectives and bolster the educational experience. Additionally, these savings are needed to offset rising costs for collective bargaining, financial aid, and capital investments. It is inherent in our business model for continual examination of how we are delivering services or conducting operations in order to maximize our resources specifically devoted to the educational experience. The University has steadily grown enrollment over the past five years while holding the general cost of educating students relatively flat. The chart below illustrates this trend. This achievement is due in large part of our work on E&E initiatives. We are currently educating more students at a more consistent cost while maintaining strategic investments in areas which sustain our high-quality educational experience.

T&F / FTE and State Appropriation / FTE



■ Appropriation / FTE (Total Enrollment)	\$12,063	\$10,135	\$10,586	\$9,005	\$9,647	\$8,925	\$9,559	\$10,424
■ Net T&F / FTE (Total Enrollment)	\$8,977	\$9,206	\$9,911	\$10,197	\$11,082	\$11,726	\$12,067	\$12,283
▲ Enrollment	51,069	53,140	55,740	58,564	59,480	60,337	61,336	62,301

Section 1: Introduction

Since 2013 the University has been primarily focused on addressing efficiencies in three critical areas to our operations: purchasing, information technology, and energy. The achievements in these areas are well documented in previous annual reports, which are available here: www.umassp.edu/budget-office/efficiency-effectiveness. As the E&E initiative has matured, the focus of addressing efficiencies in our operations has spread outside the construct of these three core areas. This report will offer information on our efforts in human resources, policy development and revisions, facilities management, and employee engagement. The growth of our E&E initiative represents the University's commitment to continuous improvement in performance and in resource optimization across operational areas.

In 2011, Accenture was engaged to help identify E&E opportunities across the system. It was thought that gaining an outside perspective could help generate new ideas and creative solutions to administrative efforts on controlling costs.

The Procurement Council has implemented three of the four recommended actions detailed in the 2011 Accenture report. The fourth item, AP centralization, is being piloted by consolidating the System Office and Dartmouth campus operations. Additional business process efficiencies are also being implemented to help streamline the AP process. Once those are fully implemented, a broader consolidation will be possible. Overall savings projections established in the Accenture report were estimated to range from \$8-16 million. The implementation of the report recommendations have resulted in savings exceeding that initial estimate to \$42 million as of the time of this report. The resulting savings incorporate an adjustment of Procurement addressable spend from the Accenture projected figure of \$200 million, to the UMass actual figure which averages \$617 million annually.

The Procurement Council continues to implement technologies to expedite business processes, allowing more resources to be focused on sourcing and contract management. In addition to the Buyways implementation, central contract repository, Esignature, and contract redlining tools, an Esourcing product is currently being evaluated that will allow for automated electronic bidding, vendor scoring, reverse auction capability, and streamlined bid documents.

The formation of strategic committees has proven to be a successful governance strategy to drive system-wide contracting opportunities, and has resulted in cost savings and efficiencies in the following areas: procurement, facilities management, energy, IT-software, and library services.

Section 2: Executive Summary of Savings and Cost Avoided ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

This year's report provides a detailed update on the University's efforts. Six new projects and additional adjustments to existing projects have added \$9.3 million in savings and cost avoidance over the life of their implementation.

In addition to updating estimates and realizing savings, the University's Task Force is continuing to develop new areas of our operations in order to foster new projects and research the best practices for implementation.

Cost Savings and Cost Avoidance

In order to ensure that cost savings are being appropriately estimated, the University has created two categories by which costs savings are evaluated.

Cost Savings represent 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, staffing efficiencies, or some other amount that yields tangible savings when compared to prior spending. It is usually presented as savings for the first year of the implementation even when the savings may last the remaining length of a contract or even indefinitely.

Costs Avoided represent 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 (but no more than 3 years beyond that first year) of a contract or initiative, but may include the first year to the extent that costs were averted that would otherwise have been spent.

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

2015 Report	# Projects	Cost Savings	Cost Avoidance	Total Savings
Purchasing Initiatives	24	\$11,720	\$29,080	\$40,800
Energy & Sustainability	31	\$13,160	\$63,124	\$76,284
IT Initiatives	74	\$31,721	\$5,020	\$36,741
Subtotal	129	\$56,601	\$97,224	\$153,825

2015 Report	# Projects	Total Savings	FY10-12	FY13	FY14	FY15	FY16	FY17	FY18	FY19+
Purchasing Initiatives	24	\$40,800	\$2,293	\$1,055	\$2,830	\$5,848	\$7,012	\$13,612	\$3,300	\$4,850
Energy & Sustainability	31	\$76,284	\$4,233	\$7,556	\$7,826	\$10,105	\$5,681	\$2,681	\$2,681	\$36,391
IT Initiatives	74	\$36,741	\$10,209	\$957	\$7,528	\$7,872	\$6,110	\$2,445	\$713	\$905
Subtotal	129	\$153,825	\$16,735	\$9,568	\$18,184	\$23,825	\$18,803	\$18,738	\$6,694	\$42,146
			\$68,312				\$86,381			
			Achieved to Date				Projected Savings + Costs Avoided			

Other E&E Initiatives

In addition, this section provides a summary of other University projects and campus specific E&E projects currently underway and the savings that have been able to achieve through their own efficiency efforts.

<i>Other E&E Initiatives</i>	# Projects	Cost Savings	Cost Avoidance	Total Savings
Building Authority Initiatives	13	\$0	\$139,181	\$139,181
Human Resources	24	\$18	\$26	\$44
Campus Initiatives	129	\$90,632	\$120,980	\$151,419

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, Strategic Energy Committee, Purchasing Council, Academic Efficiencies & Effectiveness, UMass Building Authority, and Campus Working Groups. For additional information about the administration of these groups and past achievements, please refer to our previous E&E reports which are published here: www.umassp.edu/budget-office/efficiency-effectiveness.

As part of the E&E effort's ongoing flexibility in meeting the needs of the University, the work is not limited to these defined working groups. Contained in this report are new focus areas and working groups established to work on these initiatives. These groups include:

- **Facilities Working Group** – Under the leadership of UMBA Executive Director Patricia Fillipone, the University's Senior Director of Enterprise Procurement John Healey, and UMass Medical School's Associate Vice Chancellor of Facilities Management John Baker, the Facilities E&E Working Group will identify and pursue operational effectiveness and efficiency opportunities within the domain of campus facility management and operations.
- **Human Resources Efforts** – Under the leadership of the System Human Resources Office, efforts have been identified and implemented to address compliance issues, best practices in the field, and leverage the Human Resource operations of the system.
- **Think Smart Initiative** – Under the leadership of Associate Vice President for Administration & Finance Matthew Gorzkowicz, the working group seeks employee suggestions of efficiency projects and assists in implementing active projects.

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 to accurately reflect the financial impacts of our collective efforts. A database has been developed that more efficiently tracks initiatives and allows for more timely updates to projects as well as preserving information that can ultimately be used for informational and comparative purposes.

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 they are permanent.

Section 3: Administrative Effectiveness and Efficiency ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

The University is currently implementing 129 efficiency projects. Excluding the 13 cost avoidance projects initiated by the UMass Building Authority, the total savings are projected to be approximately \$153.8 million for Administrative E&E efforts - an increase of \$9.3 million over 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.

Number of Projects by Type



IT Steering Committee

The IT Steering Committee is evaluating and implementing 74 projects with estimated savings of \$36.7 million. The IT Steering Committee has added four new projects this year which are projected to result in more than \$2.7 million in savings and cost avoidance over the life of the projects.

IT Initiatives	# Projects	Cost Savings	Cost Avoidance	Total Savings
IT Initiatives	74	\$ 31,721	\$ 5,020	\$ 36,741

2015 Report	# Projects	Total Savings	FY10-12	FY13	FY14	FY15	FY16	FY17	FY18	FY19+
IT Initiatives	74	\$36,741	\$10,209	\$957	\$7,528	\$7,872	\$6,110	\$2,445	\$713	\$905
Subtotal	74	\$36,741	\$10,209	\$957	\$7,528	\$7,872	\$6,110	\$2,445	\$713	\$905
			\$26,566				\$10,173			
			Achieved to Date				Projected Savings + Costs Avoided			

Strategic Energy Committee

The Strategic Energy Committee is evaluating and implementing 31 projects with estimated savings of \$76.2 million. The Strategic Energy Committee continues to work alongside the UMass Sustainability Committee to investigate appropriate energy management strategies and collaborate on addressing important sustainability initiatives. It is crucial to note that updated estimates from CES reflect that the solar net metering project will generate savings beyond additional projections that have been included in the numbers provided below.

Energy Initiatives	# Projects	Cost Savings	Cost Avoidance	Total Savings
Energy & Sustainability	31	\$ 13,160	\$ 63,124	\$ 76,284

2015 Report	# Projects	Total Savings	FY10-12	FY13	FY14	FY15	FY16	FY17	FY18	FY19+
Energy & Sustainability	31	\$76,284	\$4,233	\$7,556	\$7,826	\$10,105	\$5,681	\$2,681	\$2,681	\$36,391
Subtotal	31	\$76,284	\$4,233	\$7,556	\$7,826	\$10,105	\$5,681	\$2,681	\$2,681	\$36,391
			\$29,720				\$47,434			
			Achieved to Date				Projected Savings + Costs Avoided			

Purchasing Council

The Purchasing Council is evaluating and implementing 24 projects with estimated savings of \$40.8 million. The Purchasing Council has added four new projects this year which are currently under development by the group. The Council continues to develop and implement system-wide procurement guidelines and strategies that support the University's policies and leverage the collective campus purchasing power.

Purchasing Initiatives	# Projects	Cost Savings	Cost Avoidance	Total Savings
University Purchasing Initiatives	24	\$ 11,720	\$ 29,080	\$ 40,800

2015 Report	# Projects	Total Savings	FY10-12	FY13	FY14	FY15	FY16	FY17	FY18	FY19+
Purchasing Initiatives	24	\$40,800	\$2,293	\$1,055	\$2,830	\$5,848	\$7,012	\$13,612	\$3,300	\$4,850
Subtotal	24	\$40,800	\$2,293	\$1,055	\$2,830	\$5,848	\$7,012	\$13,612	\$3,300	\$4,850
			\$12,026				\$28,774			
			Achieved to Date				Projected Savings + Costs Avoided			

Some examples of initiatives currently underway, in development, or implemented:

- Lab Supplies – Contract Re-bid FY15 - Contract bid process led by Brian Girard, Director of Procurement UMass Medical School was completed in FY16. New contract projected to save university \$1.2 million annually vs. previous contract.
- Janitorial Supplies –System-wide bid process for janitorial supplies, led by Michael LaGrassa, Assistant Vice -Chancellor of Administrative Services, UMass Dartmouth to be completed during FY17.
- Residence Hall Furniture - System –wide bid for residence hall furniture, led by John Martin, Director of Procurement and Campus Services, UMass Amherst, to be completed during FY17.

Facilities Working Group

The Facilities E&E Working Group was established in FY2016 to research and recommend projects or initiatives that would improve the efficiency of maintaining University facilities and operational activities. Under the leadership of UMBA Executive Director Patricia Fillipone, the University's Senior Director of Enterprise Procurement John Healey, and the Medical School's Associate Vice Chancellor of Facilities Management John Baker, the Facilities E&E Working Group will identify and pursue operational effectiveness and efficiency opportunities within the domain of campus facility management and operations. In a limited and fiscally constrained environment, facility operations are typically subject to budget cuts before research and academic missions are impacted. These impacts are not always immediate or evident, but eventually increase the risk to operations, deferred maintenance, and repair and appearance – and ultimately the mission of the university suffers. The team will improve operational services by promoting enhanced collaboration between the UMass System and the five campus chief facility officers.

The working group will focus on facilities management operations, corrective maintenance and repair, preventive maintenance on all architectural and structural systems, grounds maintenance, janitorial services, energy utilization within buildings, utility distribution systems, specialty structures, and space planning. The group plans to discuss and research opportunities for efficiencies in areas such as:

- Advantages to a common computerized work order management system
- Developing best practices in repair, maintenance and service contracting
- Improving contract management
- Lessons learned from past construction project in regards to material, maintenance and operations effectiveness

Human Resources Efforts

The University System's Human Resources Office plays an invaluable role in delivering services to System Office employees and as a coordinating hub for the human resource areas across all the campuses. The Human Resources Office has been focused on examining areas where efficiencies can be implemented to improve services to employees and ease administrative burdens. The office's process improvement efforts include maximizing the use of Interview Exchange, a tool designed to assist in the hiring steps and onboarding process for new employees. Compliance requirements to various federal and state agencies is a critical area that Human Resources is responsible for and requires consistent action. The University is examining the best way to ease the reporting process utilized to comply with the Affordable Care Act, Massachusetts Sick Leave legislation, and Fair Labor Standards Act regulations and others. Human Resources is continually leveraging best practices to focus on efficiencies such as background check procedures and electronic filing efforts. Whenever feasible, the office works collaboratively with the Human Resources Administrators (HRA) on each of the campuses to leverage participation in shared resources and in support of the University's mission. Current and planned work speaks to the office's understanding that every aspect of the University plays a role in the larger E&E efforts.

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

- **System Office HR Onboarding Process** - All new hire onboarding forms for System office employees are now available online. This process replaces the use of email with attachments and paper mailings.
- **Hire Right Contract** - Worked with campuses to establish standardized background check services and pricing across the system resulting in an initial credit of \$12,000.
- **Interview Exchange -existing applicant tracking software** - Implemented Requisition Module within the system office in order to automate hiring approvals, eliminate paper and improve compliance.
- **EAP Vendor** - A new EAP Vendor for Amherst, Boston, Dartmouth, Lowell, and President's Office which provides valuable employee services on a system-level contract.
- **I9 Document Retention** - This was a manual process at the campuses previously. An online I9 Retention template was developed to assist the campuses to identify the I-9 records that have met document retention requirements and can now be shredded.
- **Employee Background Checks** - The system office is working in conjunction with the campuses to revise the background check standards/guidelines associated with the board policy. The purpose of the revision is to encompass CORI reform and establish consistent minimum checks by employee classification across all campuses required at hire.

Think Smart Initiative

In Fall 2014, the University Information Technology Services (UITS) launched a pilot program named "Think Smart," designed to solicit E&E opportunities from employees. A dedicated website has been created, www.thinksmart.umassp.edu, to collect submissions from employees. An online E&E idea submission form offers a platform to simply provide details to identify the idea. The appropriate E&E task force will review the submissions and will investigate the most promising leads. The ideas that are implemented will be entered into our tracking database and reported on in future annual updates. The pilot program was

marketed to staff through posters, emails, and University publications such as “On the Move”. There is certainly opportunity to engage larger audiences in the E&E effort with this program. “Think Smart” serves as an example of the commitment to including every level of the University in the E&E effort.

In FY2015, the Think Smart Initiative was expanded and introduced to the entire University System office to provide employees across departments an opportunity to provide suggestions. The campaign has elicited numerous ideas and suggestions on saving resources or creating a greater efficiency in our operations. The submitted ideas are evaluated to identify necessary decisions or steps required to implement the idea, determine if additional information or data is required to understand the idea, and determine if the University has already considered the issue and made a determination. This initiative has proven to be a useful catalyst to collect, review, and facilitate action on ideas submitted by front-line employees. The University will continue to seek ways to expand the opportunities for employee engagement and foster the viable suggestions through the implementation process.

Some examples of initiatives that were submitted to the working group and currently underway:

- **Paperless Procurement Card (ProCard) Reconciliation:** The submitted idea featured the ProCard reconciliation process and potential for improvement to that process by making it paperless. The University invested substantial effort into reducing the use of ProCards. In fact, ProCard use experienced a significant reduction in the first year of the Buyways project and those reductions will continue as we move more vendors over. The idea was forwarded to the University Controller and a staff working group has been assembled to study the steps required to accomplish this task. The working group has created a pilot program to test feasibility and the necessary steps in the process.
- **Streamlining Human Resources Processes:** The submitted idea offered an opportunity to improve some general forms and create resource guides for certain situations within a human resource context. Two examples provided were a resource guide of necessary steps in the hiring process for department managers and electronic forms for when someone is hired or leaves University service. The idea was forwarded to the System Human Resource Office for further planning. The department has identified processes for revisions and is actively working to roll out improved processes to departments and employees.



Section 4: Diversity Efforts ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

The University of Massachusetts, a major economic engine in the Commonwealth, created the UMass Minority Business Development Program with the goal of supporting Massachusetts-based and minority-owned business enterprises, promoting sustainability and leveraging cost saving opportunities.

The University developed the program in alignment with the UMass Board of Trustee's policy on procurement, which states:

The University's commitment to the principles of Affirmative Action shall be applied to purchasing with the objective of: (i) achieving and fostering greater participation in University procurement activity by minority-owned small business, small disadvantaged business, women-owned small business, HUB Zone small business, Veteran-owned small business, and service-disabled Veteran-owned small business enterprises and (ii) encouraging socially or economically disadvantaged business owners to respond to invitations to bid on University business.

As part of the program, the University Procurement Council and the UMass Building Authority collaborate with the Greater New England Minority Supplier Development Council, Inc. and the state of Massachusetts Supplier Diversity Office to identify opportunities to foster the growth of local businesses.

University staff members also attend and host a variety of industry networking events, and have established University-wide metrics and begun implementing an enhanced communications strategy.

The University continues to actively explore ways to support the growth of local businesses.

Section 5: Campus Administrative

E&E Efforts ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

Each campus has been actively participating in the University E&E Task Force working groups and benefiting from the cost savings that have been achieved through the projects implemented. In addition, there are many projects happening at the campus level implemented through collaboration at the local level with the Budget, Procurement, Facilities, Housing, and other members of the campus community. The projects described below and listed further in the appendices are a sampling of the many efforts taking place on a daily basis at the campus level are not an inclusive list of the many projects underway.

Amherst

The Amherst campus aggressively pursues cost savings and revenue enhancements in all aspects of its operations. The recently initiated Joint Subcommittee on Administrative Costs and Services (JSACS) is an extension of the campus strategic plan to evaluate administrative and support operations in terms of both cost and effectiveness of service. The Vice Chancellor of Administration and Finance collects E&E data from all of the executive areas and compiles the data for the campus. The Amherst campus is proud to report over \$18 million in cost savings and avoidance in FY16 and an additional \$20 million in total cost savings expected in FY17-19.

The Amherst campus is proud to demonstrate considerable cost savings and revenue enhancements in all aspects of the campus. The current budget situation has resulted in unfunded state-mandated collective bargaining costs which need to be offset with revenue increases and cost reductions. All areas of management are actively engaged in these cost reduction scenarios. The campus continues to demonstrate cutting-edge utility savings to take advantage of declining commodity prices as well as government-sponsored clean energy credits and programs. The IT department continues to leverage buying power to obtain price discounts and additional goods and services to offset new costs needed to address deferred maintenance of networks and data centers. Finally, administrative areas throughout campus have reduced 30 FTE staff through vacancies, administrative reorganizations and deferred hiring.

As the campus continues with its goal of being the destination of choice for the best students and faculty, E&E initiatives are a constant theme at all levels of the organization. UMass Amherst understands and embraces its role as stewards of public resources and strives to provide the highest quality value for its students and strategic partners through the identification and implementation of cost savings strategies.

Amherst	# Projects	\$ Projects
Energy & Sustainability	6	9,436,000
IT	5	6,599,276
Revenue	2	4,375,000
Space & Building	4	4,090,500
HR Processes	6	5,062,145
Purchasing	3	14,681,077
TOTAL	26	44,243,998

Boston

The Boston campus is pleased to submit its report on the work and accomplishments around Efficiency and Effectiveness (E&E). It is believed that this report is reflective of its commitment to these efforts. UMass Boston continues its work on a number of E&E projects with the System's office and at the campus level. This report offers a sampling of our efforts to provide more efficient, enhanced and improved administrative infrastructure and services to our students, faculty and staff. The following information is intended to provide a high level summary of the work underway in areas such as technology improvements, space and building efficiencies, purchasing, energy and sustainability, human resource processes, and administrative practice.

In summary, UMass Boston strives to improve service offerings and its administrative infrastructure with an eye on cost savings and increased efficiencies. The projects highlighted in this narrative represent this work. Of the projects noted, we estimate a savings and/or cost avoidance exceeding \$16M between the period of FY14-FY20. Beyond financial, other benefits to implementing these programs include improved and enhanced services, productivity improvements and higher levels and improved levels of customer service for our students, faculty and staff.

We will continue to work collaboratively both at a campus level and with the System's office on identifying ways that we can introduce cost containment measures with an eye on continuous improvements in our business and service areas.

Boston	# Projects	\$ Projects
Purchasing	2	\$ 1,624,336
Energy & Sustainability	10	\$ 3,409,766
IT	11	\$ 1,320,000
Revenue	1	\$ 1,822,622
Admin. Practice	1	\$ 100,000
HR Processes	3	\$ 850,000
Space & Building	8	\$ 7,210,000
TOTAL	36	\$ 16,336,724

*Full project listing in Appendix

Dartmouth

The Dartmouth campus has assessed the diverse E&E initiatives by reviewing the results of multiple fiscal years. The campus has begun to restructure services, enhance business principles and refine cost savings goals that improve the student and the university community's experience. The campus has utilized UMassD Transform 2020 Strategic plan to prioritize its E&E approach in the goals of the strategic plan.

As the campus reprioritizes its current E&E projects the following initiatives will be moved into maintenance and continued to be benchmarked and assessed. Projects include efforts around human resources and administrative practices such as campus security.

Dartmouth has numerous active projects underway addressing various areas. These projects include outsourcing of the campus bookstore operations and outsourcing of credit card payments for tuition & fees. The campus is in the final stages of an analysis and feasibility of further Optimization of Print Devices with mobile print capability. The campus through an inventory and operational analysis of devices will develop a report on the opportunity to reduce overall costs associated with printing on campus while enhancing customer service, transparency and access. The Dartmouth Campus is the creator and lead of a procurement process for janitorial supplies for the University System. Currently a University System RFP process is being developed with the anticipation that the RFP will be done in the late spring of 2016 or early summer.

The campus has executed numerous initiatives to improve our service excellence; this is achieved through the University's commitment to benchmarking our efficiencies. This has allowed the campus to anticipate and proactively align services; decreasing expenses, benefit through cost savings and seek revenue opportunities.

Examples of these initiatives include: eBilling Implementation, Outsourcing of the campus bookstore, IT Asset Redesign and the Labor Construction Electronic Bidding Solution to name a few under development and active initiatives.

The Dartmouth Campus is committed to developing sustainable efficient and effective services that continue to improve services and generate efficiencies directly in line with UMassD Transform 2020 Strategic plan. The Dartmouth campus remains dedicated to continuing to drive initiatives on the campus or lead system objectives that will progress efficient and effective business practices, in partnership with the UMass System's Efficiency and Effectiveness Task Force.

*Full project listing in Appendices

Dartmouth	# Projects	\$ Projects
Purchasing	3	\$ 1,905,380
Energy & Sustainability	2	\$ 892,000
Admin. Practice	6	\$ 522,000
Revenue	1	\$ 5,319,770
Human Resources	4	\$ -
IT	1	\$ 15,500
Strategic Re-allocation	2	\$ 575,000
Space & Building	1	\$ 133,000
TOTAL	20	\$ 4,042,880

Striving to improve services and support a sustainable financial future are key elements of the Entrepreneurial Stewardship Pillar of Lowell’s 2020 Strategic Plan. Numerous E&E initiatives in recent years reflect our on-going commitment to these goals. The Finance & Operations division has been responsible for many of the E&E projects and programs related to Energy, Information Technology, Human Resources, Purchasing and Revenue Generation. The Vice Chancellor’s leadership team regularly reviews opportunities for initiating new projects and coordinates reporting results to the Executive Cabinet, the 2020 Financial Planning Committee and to the President’s Office.

The campus has recently added a new 2020 Committee under the Transformational Education Pillar of the Strategic Plan: Academic Effectiveness and Efficiency. This committee will focus on identifying and implementing E&E programs focused on improving student success, course and program delivery, enhancing collaborations with other colleges and universities, laboratories and industry partnerships. The committee will also look at ways to increase revenues through expanding the successful on-line program and enhancing our enrollment management activities to grow the number of out of state, international and Master’s degree students.

Finally, the Lowell campus continues to partner with the system office and other campuses on system-wide contracting and procurement initiatives to drive savings and control costs.

Lowell	# Projects	\$ Projects
Purchasing	3	\$ 19,053,200
Energy & Sustainability	6	\$ 52,654,000
Revenue	1	\$ -
HR Processes	3	\$
IT	4	\$ 2,561,051
Strategic Re-allocation	3	\$ 5,427,000
Space & Building	1	
TOTAL	22	\$ 79,695,251

*Full project listing in Appendices

Medical School

The Medical School began its Excellence Program (EP) in FY 2011 to initiate an inclusive process for reducing operational costs and providing optimal service to mission-based operations in teaching, research and patient care. The EP has been the catalyst for a number of ongoing process improvements shared with clinical partner UMass Memorial, and serves as the basis for a continuing and ongoing evaluation of business processes and operations. Because a significant portion of the UMMS operating budget, such as research funding and Commonwealth Medicine contracts for services, is restricted and thus essentially self-balancing, the operating budget must depend on increases in revenue and efficiencies in areas such as central administrative operations to counterbalance decreases in federal and state core support.

For the past year, EP projects have been organized into three major categories: administrative services, non-core services and consolidated services. Examples of completed EP initiatives include the initiation of Administrative Services Groups (ASGs) which combined small, localized support staff into more robust and self-sustaining service groups that provide greater expertise and continuity for a larger clientele, with fewer FTEs overall; and the sale of off-campus properties with high operational costs parallel with consolidation of the staff to the central campus. FY 2015 examples of new projects include energy efficiency efforts such as retro-commissioning of our science buildings and net metering purchase credits; and, IT improvements such as Storage for Science and movement of commodity services to the Microsoft Cloud; and, an initiative in the Human Resources area to streamline immigration case data collection and processing and to improve compliance results.

Approximately two years ago, the EP adopted the use of Lean methodology for analysis of potential initiatives and to produce options for improvements in all administrative functions. Over 559 personnel have been trained in Lean methodology, with a goal of 610 by the end of FY 2016. Not only has the training brought additional rigor to the analysis of “pain points” in our operations, it has become a culture change agent which is helping to engrain efficiency and effectiveness as key factors in all our key infrastructure and support activities. Training and implementation of the Lean methodology for improving our services has increased collaboration within our departments and also, importantly, between operational units. A quote from a team participant captures this philosophy: “we are one team, working on one customer, not many different silos.”

Medical School	# Projects	\$ Projects
Energy & Sustainability	9	\$ 14,049,000
HR Processes	6	\$ 512,284
Purchasing	1	\$ 555,000
IT	3	\$ 3,309,000
Revenue	1	\$ 12,320,000
Space & Building	3	\$ 18,194,000
Strategic Re-allocation	2	\$ 6,468,409
TOTAL	25	\$ 55,407,693

*Full project listing in Appendices

Section 6: 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	\$ -	\$ 139,181	\$ 139,181

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:

- **New Debt 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.

The Project Revenue Bonds, Senior Series 2014-1 (Tax Exempt) had a 4.5% total cost of financing, producing a total debt service \$13.6 million lower than the originally anticipated 5.0% total cost of financing budgeted by the campuses in FY14.

On February 25, 2015 UMBA sold \$298.795 million of 2015-1 project revenue bonds at an all-time low interest rate of 3.75%. The Authority had assumed an interest rate of 5% in its budget projections. With an interest rate of 3.75% the Authority saved approximately \$35.6 million vs what was budgeted.

- **Refunding Savings** – On May 20, 2014, UMBA successfully priced two separate refunding series of bonds and saved the University \$25 million in future debt service over the next 15 years. UMBA issued \$67 million of the Series 2014-3 Revenue Refunding Bonds on a tax exempt basis. The new refunding bonds’ interest cost equals 2.75% versus the original interest cost of the bonds refinanced of 5.05%. Total cash flow savings through the final maturity of the bonds (2030) is \$14.3 million. In addition, the Building Authority successfully priced \$168 million of the Series 2014-4 Revenue Refunding Bonds on a federally taxable basis. The new refunding bonds’ interest cost equals 2.07% versus the original interest cost of the bonds refinanced of 4.04%. Total cash flow savings through the final maturity of the bonds is (2026) \$10.7 million.

On February 25, 2015 UMBA sold \$191.823 million of 2015-2 refunding bonds to refund \$199.875 million of existing bonds for savings. The Authority achieved total cash flow savings of \$22.6 million over the next 22 years. The existing debt was over 4%, the new debt is 2.78%.

- **“Just in Time Borrowing** – The “Just in Time” borrowing 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

Extension and Replacement of Liquidity Facility which supports 2008-A, 2008-1 and 2011-1 Bonds- On June 9, 2011 UMBA issued Refunding Revenue Bonds, Series 2011-1. The Bonds were issued as variable rate demand obligations bearing interest at a rate that resets weekly and are subject to mandatory and optional tender. Therefore, they need to be supported by a liquidity facility, which is provided by Wells Fargo, National Association and expired June 9, 2014.

UMBA explored options to extend or replace the liquidity facility and received a favorable proposal to extend the existing facility with Wells Fargo. They offered a term sheet to extend the existing facility at 25 basis points for another three year term. This rate is very favorable based on the current rate at 40 basis points on the expiring facility, as well as current market conditions.

It should be noted that this transaction saved the campuses approximately \$500 thousand in liquidity fees over a three year period by renewing this facility at the lower rate of 25 basis points.

Two liquidity facilities that backed the 2008-1 and 2008-A series were set to expire in April 2016. The Authority renewed one facility and replaced another facility, and secured very competitive rates for both in the process, 27.5 and 29 basis points respectively. The terms of the agreements are for three years. In one case the rate the Authority negotiated was lower than the previous rate (32.5). The Authority's financial advisor stated that a 40 basis point rate was competitive and anything lower than that was excellent. Using 40 basis points as a benchmark the new rates secured by the Authority saved \$677 thousand over the term of the agreements.

- **Commercial Paper Liquidity Facility BAFO** – 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
- **Construction Audit Program** – In fiscal year 2014, UMBA initiated a construction audit program to control costs and to implement industry leading practices. The construction audit program included the development of Owner's Project Management guidelines, as well as associated training, in which responsibilities, procedures and project controls are clearly outlined and defined for all project management firms working for UMBA. The audit program has involved closeout reviews, payment application monitoring, and the utilization of audit firms for the review of contract terms and disputes. UMBA has achieved contractual savings and avoided costs of \$1.37 million through FY15 from this program. In addition, utilization of the common findings of the external audits has permitted UMBA to enhance its internal contract management practices with positive results in identifying potential areas of concern or conflict.
- **Owner Controlled Insurance Program (OCIP I & II)** - OCIP I will save the Building Authority an estimated \$8-9M in savings on 14 projects. OCIP II is underway and has 6 projects under its umbrella and is expected to save the University \$5 million.

Appendices ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

- Previous Efforts before 2011
 - Please see 2015 Efficiency & Effectiveness Report : <https://www.umassp.edu/sites/umassp.edu/files/content/publications/budget-office/E-E%20Report%20-%20Final%20-%20removed%20pic%207-7-15.pdf>
- List of University System Projects
- List of Campus Projects

Category	Status	Project Title	Description	Cost Avoidance	Cost Savings
University - Purchasing	Active	Athletics Advertising	University-wide contract w/ office supply vendors for advertising. Revenue generation for the University	\$ -	\$ 1,500.00
University - Purchasing	Completed	Copier/Printer Maintenance- Program goal convert to single vendor, multi functional devices. Align system for full bid process 2014	Xerox awarded system-wide agreement.	\$ 3,200.00	\$ 800.00
University - Purchasing	Under Development	Dorm Furniture		\$ -	\$ -
University - Purchasing	Under Development	Dorm furniture-establish system wide contract	Complete system wide agreement for dorm furniture utilizing expertise of facility, resident life managers. Form user/evaluation committee	\$ -	\$ -
University - Purchasing	Completed	Dorm Mattress Bid	3 campuses combined dorm mattress purchases for 3 year period.	\$ 60.00	\$ 30.00
University - Purchasing	Completed	Electronic journals. Complete system wide agreement with Elsevier	System wide contract Completed with Elsevier	\$ 560.00	\$ -
University - Purchasing	Under Development	Elevator Maintenance Contract Re-bid		\$ -	\$ -
University - Purchasing	Completed	Elevator Maintenance-includes 4 campuses: Lowell, Boston, Amherst, Dartmouth	Otis Elevator awarded University-wide contract	\$ 1,250.00	\$ 650.00
University - Purchasing	Completed	Executive search services	Pre-qualified list of vendors, fixed benefit offerings, ceiling pricing implemented	\$ 90.00	\$ -
University - Purchasing	Completed	IT staff augmentation	Pre-qualified list of companies (suppliers). Agreed upon terms and conditions	\$ 15.00	\$ -
University - Purchasing	Under Development	Janitorial Supplies		\$ -	\$ -
University - Purchasing		Lab Supplies - Bid Two primary vendors- Contract re-bid FY15		\$ 5,000.00	\$ -
University - Purchasing	Completed	Lab Supplies- Bid two primary vendors. Contract awarded to Fisher.	Fisher Scientific awarded system-wide contract for lab supplies/distribution.	\$ 800.00	\$ 200.00
University - Purchasing	Completed	Lab Supplies- Bid two primary vendors. Contract awarded to Fisher.	Fisher Scientific awarded system-wide contract for lab supplies/distribution.	\$ 160.00	\$ 160.00
University - Purchasing	Under Development	Lamps	Complete system wide contract for lamps, lighting	\$ -	\$ -
University - Purchasing	Completed	Multi-year financial planning tool	Complete contract for software planning tool that allows consistency in financial planning across all campuses. Contract completed with PFM consulting. Allows for campus and system level roll-up of financial projections. RFP process completed, low bidder not selected, however average bid price was \$310k annual vs. contracted price of \$200k annual.	\$ 550.00	\$ -
University - Purchasing	Completed	Office Supplies-includes all five campuses and the System Office	University-wide contract w/ WB Mason for office supplies.	\$ 895.00	\$ -
University - Purchasing	Active	Office Supplies-includes all five campuses and the System Office	University-wide contract w/ Office Max for office supplies. Includes an additional revenue of \$1.5million for University athletic sponsorships	\$ 4,800.00	\$ 1,380.00
University - Purchasing	Under Development	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	\$ -	\$ -
University - Purchasing	Active	SciQuest Implementation	Create university wide market place for procurement of goods	\$ 10,600.00	\$ 6,000.00
University - Purchasing	Under Development	Temporary help services	Create university wide contract for temporary help services	\$ -	\$ -
University - Purchasing	Active	Travel services. Implement travel services to include travel agency, negotiated air, hotel, auto rental contracts	Implement managed travel program	\$ 1,100.00	\$ 1,000.00
University - Purchasing	Active	Vehicle leasing- contract completed 8/13.	Replace existing campus owned vehicles with leased vehicles	\$ -	\$ -
University - Purchasing	Under Development	Waste stream management	Complete consulting contract to evaluate current waste stream management practices across the university system, including solid, hazardous waste and recycling services	\$ -	\$ -
University - IT	Completed	9C Budget Re-Alignment - Non-Personnel	Elimination of historically high budget placeholders in Admin Expenses, Temp Help, Consulting & EE Train & Travel.	\$ -	\$ 56.00
University - IT	Completed	9C Budget Re-Alignment - Personnel	Reduced 9 FTE's and contract employee positions related to redundant administrative & management staff.	\$ -	\$ 1,500.00
University - IT	Active	Adobe	Prepare for System wide bid process 2/13. Update 12/5/14: Three year contract completed, total annual cost avoidance \$39,000. Improved product offering, Adobe Creative Cloud. all campuses and System Office participating excepting the Medical School.	\$ 78.00	\$ 39.00
University - IT	Completed	Advancement Implementation	"Implement Advancement system for UMB, UMD and UML Upgrade UMW to current version"	\$ -	\$ -
University - IT	Active	Anti Virus Software	Current campus contracts expire, evaluate university-wide contract. Update 12/5/14: System contract completed with McAfee. All campuses participating except the Medical School.	\$ 50.00	\$ -
University - IT	Completed	Apple System wide agreement	Work with Apple by and all campuses to create a University wide agreement that provides an enhanced level of discounting and standard business terms	\$ -	\$ 90.00
University - IT	Completed	Atomic Learning	Training software currently being bid by A, B, D, L	\$ 35.00	\$ 4.00
University - IT	Active	Automated Testing Tools	Software tool that allows "scripts" to be written to automate testing typically performed manually by application developers/specialists. Testing needs to be performed anytime there is a software update, fix, patch, etc. Savings relate to productivity gains and are categorized as cost avoidance. Total savings adjusted for upfront license cost of \$34K and annual maintenance of \$11K. This is a preliminary savings estimate and will be updated as the product matures.	\$ 254.60	\$ -
University - IT	Completed	BoardVantage	Effort to migrate Board of Trustee documents to fully paperless environment.	\$ -	\$ 141.00
University - IT	Active	Business Intelligence	Dashboard development and upgrade for SUMMIT (Financials, HR and Student Administration)	\$ 90.00	\$ -
University - IT	Completed	CedarCrestone	Brought legs & regs consulting service in-house as part of upgrade functionality/approach.	\$ -	\$ 72.00
University - IT	Completed	Checkpoint Security Software	Negotiated savings on university contract, savings thus far limited to Lowell and Dartmouth. Preferred university wide agreement available for use by other campuses. Existing cost not used, avoidance savings relates to projected spend vs. final negotiated deal.	\$ 187.00	\$ -
University - IT	Active	Cognos Transition & Mobius Retirement	"Build SA dashboards Retire Mobius report system with XML Publisher, PeopleSoft Report Manager & Summit dashboards"	\$ 1,000.00	\$ -

University - IT	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	\$ 5,019.00	\$ -
University - IT	Active	Dell (Desktop/laptop)		\$ 2,250.00	\$ -
University - IT	Completed	Dell (KACE End Point Software)	Negotiated 4 year savings off of state contract. Included in the deal were an additional 13,100 licenses, 4 additional servers (2 virtual; 2 physical), two weeks on-site training and 24 hours jump start training. The licenses and training were value added as part of the deal. Existing cost below excludes Lowell (no spend PY). Lowell generated cost avoidance savings based on their projected cost before system deal negotiated. Cost avoidance includes \$38K of avoided 4th year maintenance and \$68K of avoided product costs. Campus savings spread equally, Healey to revisit.	\$ 106.00	\$ 12.00
University - IT	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. Update 12/5/14: Contracts improved as a result of presence in Buyways resulting in an additional savings of \$355,000 during fiscal 2105. System wide bid process to be initiated for 2016	\$ 955.00	\$ 300.00
University - IT	Active	Document Imaging Program	Implement for Undergraduate Admissions	\$ -	\$ 614.00
University - IT	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	\$ -	\$ -
University - IT	Under Development	Echo 360 Contract Re-bid		\$ -	\$ -
University - IT	Completed	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.	\$ 300.00	\$ 50.00
University - IT	Completed	EMC Data Domain (Accunet)	Consolidation of storage backup functionality to Data Domain from both Avamar and Data Domain.	\$ 769.00	\$ 109.00
University - IT	Under Development	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.	\$ -	\$ -
University - IT	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	\$ 2,800.00	\$ -
University - IT	Under Development	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.	\$ -	\$ -
University - IT	Completed	Fujitsu Maintenance	Reduced maintenance negotiated. Renewal amount \$8,000 per year with Fujitsu; negotiated a three year deal with Fujitsu for \$13,500 resulting in savings of \$10,500 during over three years. Used availability of maintenance from competitor (Oracle) as leverage in the negotiation. Existing cost below includes entire contract term.	\$ 7.00	\$ 3.50
University - IT	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.	\$ -	\$ 8.00
University - IT	Under Development	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.	\$ -	\$ -
University - IT	Under Development	IBM (SPSS)	Goal is to increase access across the University while reducing cost per usage. Update 12/5/14: System wide contract completed. Additional investment to include all campuses covered under University site license. additional product and access for students, faculty. System contract resulted in one year cost avoidance of \$50,000	\$ 50.00	\$ -
University - IT	Under Development	Identity Finder (Data Loss Prevention)	Purchased Identify Finder software tool to support data loss prevention related to personally identifiable information (PII). Rollout includes all campuses to varying degrees of completeness. Ongoing effort. Since March 2014 18 million sensitive records have been discovered; of those, 9.5 million have been remediated. While it is difficult to estimate avoided costs related to the remediated records, the Ponemon Research Organization estimated that it costs an organization about \$211 per breached record related to providing credit counseling & protection services in addition to liability related costs. This would translate to a \$2B avoided cost related to the 9.5 million remediated records. No cost avoidance dollar figures entered given the volatile and uncertain nature of this risk.	\$ -	\$ -
University - IT	Active	Identity Management Update	"Enhance security and auditing Continuation of Single Signon Ease of use and management Cost savings from above"	\$ 150.00	\$ -
University - IT	Completed	Integration Partners	Optical infrastructure HW and SW related to UMassnet rollout.	\$ 300.00	\$ -
University - IT	Active	International Office	Software application to integrate with the Student and Exchange Visitor Information System (SEVIS)	\$ -	\$ -
University - IT	Active	IT Reseller RFP	Issue RFP for University wide IT reseller services (exclusive of laptop/desktop, Microsoft and Adobe-products currently under contract) update 12/5/14: contract awarded to Gov Connection.	\$ 256.00	\$ 64.00
University - IT	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.	\$ 300.00	\$ 38.00
University - IT	Under Development	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.	\$ -	\$ -
University - IT	Completed	Lecture Capture software (Echo360)	Standardize lecture capture software license across all campuses converting to a site license agreement	\$ 390.00	\$ -

University - IT	Completed	Lenovo	2 extension of the Lenovo agreement with additional 3% discount on Lenovo equipment	\$ -	\$ -
			Entered into a "self-maintainer" agreement for Lenovo desktop/laptop purchases within SO whereby Lenovo ships parts to UITs for local repair vs. sending out a Lenovo technician and/or returning device to a "repair depot" for processing. Mainly applies to laptop purchases. Self-maintainer agreement results in \$70 per repair payment from Lenovo for laptops (slightly less for desktops/peripherals). In addition, precludes the need to purchase up-front on-site warranty option costing \$63.20 for laptops (existing cost ID'd below). Also avoids productivity loss (approximately 9 days) for "repair depot" processing. The start-up fee of \$1000 for this program was waived, in addition to a bi-annual fee of \$500. See attached spreadsheet for details.	\$ 26.34	\$ -
University - IT	Completed	Lenovo Self Maintainer			
University - IT	Completed	License & Maintenance Reductions - Ongoing	Reduction in HW/SW maintenance related to eliminated or reduced products including: Citrix, Retrofit, EIR, Oracle & Business Objects	\$ 300.00	\$ 150.00
University - IT	Completed	License & Maintenance Reductions - Ongoing	Reduction in HW/SW maintenance related to eliminated or reduced products including: Xerox, EMC, Mobius, temp help	\$ -	\$ 400.00
University - IT	Completed	License & Maintenance Reductions - Ongoing	Reduction in HW/SW maintenance related to eliminated or reduced products including: small equipment purchases, Brigadoon, Temp Help, Cognos.	\$ -	\$ 91.00
University - IT	Completed	Lightspeed Maintenance	Network maintenance reduced by analyzing # of network elements and taking action to reduce, in addition to negotiated loyalty discount.	\$ 6.00	\$ 9.00
University - IT	Completed	Math Works (Mat Lab)	5 campuses utilizing software (no use System Office). Update 12/5/14: Year two of contract, cost avoidance based on unlimited license vs. cost of individual campus licenses \$30,000	\$ 43.00	\$ -
University - IT	Completed	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.	\$ -	\$ -
University - IT	Active	MGPCC	Provide a state of the art, green Data Center to support the future of high performance computing needs for the University research community	\$ 800.00	\$ -
University - IT	Completed	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.	\$ 69.00	\$ 41.00
University - IT	Under Development	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)"	\$ -	\$ -
University - IT	Active	Mobile device Optimization	Consolidate all existing University mobile devices into a shared/pooled minutes program with existing carriers: completed 5/13	\$ 1,362.00	\$ 528.00
University - IT	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	\$ -	\$ 100.00
University - IT	Completed	Open Position Elimination	Eliminated 4 open positions, 3 CAS and 1 ISIS.	\$ 450.00	\$ -
University - IT	Completed	Oracle Licensing Re-Negotiation		\$ 204.00	\$ -
University - IT	Completed	Oracle Maintenance Savings	Negotiated a 2% renewal increase cap on all Oracle software license/maintenance renewals. Renewals typically average 3%. This was negotiated as part of a purchase deal for additional IDM-related licenses. Total FY15 (end of year) Oracle software maintenance base is \$3,204,878, renewal cap calculated over 3 years. See attached spreadsheet for savings calculations.	\$ 192.98	\$ -
University - IT	Completed	Project Implementation Methodology - FIN9.1 Upgrade	Impact of moving towards in-house upgrade process vs. engaging external implementation partners	\$ 4,934.00	\$ -
University - IT	Active	Project Implementation Methodology - HCM 9.2 Upgrade	Impact of moving towards in-house upgrade process vs. engaging external implementation partners	\$ 4,001.00	\$ -
University - IT	Active	Qualtrics - Survey Tool		\$ 70.00	\$ 10.00
University - IT	Completed	Safari Books	Purchased subscription to online technical resource data provider for \$25K in an effort to reduce employee travel & training costs.	\$ 15.00	\$ -
University - IT	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	\$ 330.00	\$ -
University - IT	Completed	Server/Storage Architecture	Change in server & storage architecture resulting in reduced hardware maintenance costs.	\$ 1,130.00	\$ -
University - IT	Active	Shared Services Portal Expansion	Tool to improve internal University communications	\$ 10.00	\$ -
University - IT	Under Development	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"	\$ -	\$ -
University - IT	Completed	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.	\$ -	\$ -
University - IT	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	\$ 300.00	\$ -

University - IT	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.	\$ -	\$ -
University - IT	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.	\$ -	\$ -
University - IT	Completed	UITS Applications Management Re-Organization	Reorganization of the Business Intelligence and Applications Management areas (HCM, FIN & Student) to better align resources and work flow, and improve overall productivity, service levels and work output. See attached email for additional information. No dollar savings identified, this is a soft benefit E&E item.	\$ -	\$ -
University - IT	Completed	UITS Personnel Re-Organization	Eliminated 4 FTE's related to redundant management staff.	\$ -	\$ 500.00
University - IT	Active	UMassNet	Provide scalable, cost-effective reliable high-capacity networking connectivity between campuses to the Internet, Internet2 and MGHPCC	\$ -	\$ -
University - IT	Completed	UMOL Blackboard Learn9 LMS Implementation	Support UMOL campus migration from current Blackboard Vista LMS to Blackboard Learn9	\$ -	\$ -
University - IT	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	\$ 570.00	\$ -
University - IT	Under Development	Virtual Desktop Initiative (VDI)	Provides for file sharing across the desktop/laptop of common software packages served over the network/internet	\$ -	\$ -
University - IT	Completed	Virtualization Strategy	Strategic shift to virtualized computer processing (racks & blades) versus traditional big box server approach.	\$ 1,281.00	\$ -
University - IT	Active	VM Ware		\$ 280.00	\$ 90.00
University - HR Processes	Under Development	403B Supplemental Retirement Restructuring	Enhanced participants services and improved administrative efficiencies; Reduced overall administrative/participant costs; Improved employee communication, education, and assistance	\$ -	\$ -
University - HR Processes	Under Development	Affirmative Action Reporting	Continue to collaborate with the other campuses using CAAMS on how we can do things more efficiently on the HR System side to feed into CAAMS. In the past data was being changed outside of the system and never being updated in the source system.	\$ -	\$ -
University - HR Processes	Under Development	Applicant Tracking	New ATS Vendor for A,B,D,L, PO	\$ -	\$ -
University - HR Processes	Under Development	Background Check Vendor	New System background check vendor (October 2016)	\$ -	\$ -
University - HR Processes	Completed	Compliance Initiatives	The System Office working in collaboration with campuses and Commonwealth has implemented the required reporting under the ACA as well as the requirements under the new MA Earned Sick Leave Law, without the use of outside consultants	\$ -	\$ -
University - HR Processes	Completed	CORSAIR Jobs (CSO)	Software was implemented to assist in streamline the UMD student employment entry into the system. The new process now feeds from an online posting system into the ePAF form which eliminates having to manually enter this information into the system, eliminates emails having to be sent to the departments when the student is hired and eliminates reports having to be sent out.	\$ -	\$ -
University - HR Processes	Completed	EAP	New EAP Vendor for A,B,D,L, PO	\$ -	\$ -
University - HR Processes	Under Development	Employee Background Checks	The system office is working in conjunction with the campuses to revise the background check standards/guidelines associated with the board policy. The purpose of the revision is to encompass CORI reform and establish consistent minimum checks by employee classification across all campuses required at hire	\$ -	\$ -
University - HR Processes	Active	Employee Work/Life Trainings	The New EAP contract includes 30 hours of training per campus and PO per year	\$ -	\$ -
University - HR Processes	Under Development	EPAF	System-wide Enhancements (Gideon Taylor)	\$ -	\$ -
University - HR Processes	Under Development	EPAF - Donahue Institute	We are currently working with the Donahue to process funding changes transactions through EPAF. Once this implemented this will save the department a great deal of time approving transactions (mostly funding) online.	\$ -	\$ -
University - HR Processes	Under Development	EPAF II	Implementing to all departments within System Office (Beginning July 2016)	\$ -	\$ -
University - HR Processes	Completed	HireRight Contract	Worked with campuses to establish standardized background check services and pricing across the system resulting in credit of \$12,000 and improved pricing	\$ -	\$ -
University - HR Processes	Under Development	HR Off Boarding Process (Roll Off)	The System office is in the process of eliminating the manual roll off form. This process will be replaced by an automated workflow that will be sent to applicable parties at time of termination. The report that will be produced will be a scheduled query so that it will be automated and will reach all parties. Once an initiator submits an ePAF the report will be distributed to the current roll off group. If someone needs to gain access to the departing employee's drives, email etc. they will contact the helpdesk.	\$ -	\$ -
University - HR Processes	Completed	I9 Document Retention	This was a manual process at the campuses previously. An online I9 Retention template was developed to assist the campuses to identify the I-9 records that have met document retention requirements and can now be shredded.	\$ -	\$ -
University - HR Processes	Completed	IDM Upgrade	Centrally we have implemented an IDM upgrade that will assist in provisioning and de-provisioning employees when they are hired/terminated from employment. This creates a more efficient way of ensuring the IT systems are in sync with the HR System and the correct security has been applied. Work will begin with the other campuses as well.	\$ -	\$ -
University - HR Processes	Completed	Internal Reporting	Reports being distributed to departments within the system office were "manually" being run and distributed. We now have automated this through a scheduling tool that emails the respective person their data. It no longer requires to have to manually run these reports.	\$ -	\$ -
University - HR Processes	Completed	Interview Exchange - existing applicant tracking software	Implemented Requisition Module within the system office in order to automate hiring approvals, eliminate paper and improve compliance	\$ -	\$ -

University - HR Processes	Completed	Mass Sick Program	Continue to work on automating the enrolling and un-enrolling of thousands of students in the Mass Sick Program	\$ -	\$ -
			Work continues with General Counsel and campuses in order to better support employment-based immigration visa processing. Standardized business process, enhanced reports and alerts have been built to help tighten the processing at the campuses. System is in place.	\$ -	\$ -
University - HR Processes	Completed	Sunapsis (Case Management System)			
University - HR Processes	Completed	System Office HR Onboarding Process	All new hire onboarding forms for System office employees are now available online. This process replaces the use of email with attachments and paper mailings	\$ -	\$ -
University - HR Processes	Under Development	System Office HR Onboarding Process, Phase II	Phase II consists of electronic acknowledgement of university policies by employee	\$ -	\$ -
			This report has to be manually produced and tracked each pay period for the individuals that do not manually approve time through the system. Currently the Systems Office is taking a lead on this with the Application Steward and UITS to have this automated through Summit so that reports no longer have to be produced.	\$ -	\$ -
University - HR Processes	Completed	T&L 706 Report			
University - HR Processes	Completed	Topical Reporting	Efforts are on their way to create additional reports through Summit which include GAAP reporting, Tuition waiver Reporting, Contract Costing Reporting	\$ -	\$ -
University - Energy	Completed	Add DDC controls to Donahue, Sheehy	Add DDC BAS controls to three residence halls	\$ -	\$ -
University - Energy	Active	AEP	Total Campus AEP	\$ 2,400.00	\$ -
University - Energy	Active	Complete ETIC, HSSB, North Campus Garage	Two New LEED Construction buildings plus a parking garage	\$ -	\$ -
University - Energy	Active	Electricity Bid	4 campus combined bid for electricity supply.	\$ 4,300.00	\$ -
University - Energy	Completed	energy & natural gas procurement	Bid process and hedging strategy for electricity and natural gas supply	\$ -	\$ 226.00
University - Energy	Completed	Energy conservation effort	Multi-faceted energy conservation program	\$ 2,400.00	\$ -
University - Energy	Completed	Energy efficiency projects	UMMS received \$8.5m in incentives from National Grid, resulting projects will generate \$6.8m future electric savings	\$ -	\$ 6,800.00
University - Energy	Active	Energy performance project	\$40m energy performance project implemented by NORESCO and managed through DCAM	\$ 1,600.00	\$ -
University - Energy	Completed	Energy procurement	Bid process and hedging strategy for electricity and natural gas supply	\$ -	\$ 1,180.00
University - Energy	Completed	Gas turbine generator upgrade		\$ -	\$ 1,425.00
University - Energy	Active	Hadley Horse Farm Solar PV	2 MW Solar PV Field. Combination Net Metering / Research Project.	\$ -	\$ -
University - Energy	Active	ICC BAS and update to new vav boxes	Update BAS to new DDC web based system	\$ -	\$ -
University - Energy	Completed	ICC fuel switch from electric to nat. gas heat	Replace older Rooftop makeup air unit using nat. gas instead of electric heat.	\$ -	\$ -
University - Energy	Active	Install Energy Efficient Chiller - Weed	Remove Absorber and reduce GHGs and energy by replaing with Magnetic Levitation Chiller.	\$ -	\$ -
			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.	\$ -	\$ -
University - Energy	Active	Install North Campus Boiler Plant			
University - Energy	Completed	Installation new boiler		\$ -	\$ 165.00
University - Energy	Completed	Lamp replacement project	Repalcement of 1,700 T8 florescent lamps	\$ -	\$ 159.00
University - Energy	Completed	Lighting Occupancy Sensors Library, Gorman Dorm Steam Line Replacement, CHP Gas Compressor Motor Eff.	Annual energy reduction project	\$ 1,140.00	\$ 570.00
University - Energy	Completed	LNG Temporary Facility	Operational 12/2012	\$ -	\$ 2,300.00
University - Energy	Active	Multiple Lighting upgrades	Olney, Olsen, Ball, Univ. Ave Exterior	\$ -	\$ -
University - Energy	Completed	Natural gas procurement-bid process		\$ 200.00	\$ -
University - Energy	Completed	Photovoltaic arrays installation	Installation on the Tripp Athletic Center	\$ -	\$ 150.00
University - Energy	Active	Regional Anaerobic Digester	A DCAMM and MADEP effort to install a Regional Anaerobic Digester for the Amherst area on University property.	\$ -	\$ -
University - Energy	Completed	Replace Zamboni Boilers, add VFDs to AHUs and retroCx HVAC units and controls	Reduce heat and electricity by improving energy efficiency	\$ -	\$ -
University - Energy	Completed	Solar/Net Metering Contract	Reduction in energy spend through credit earned from contractual support of solar development.	\$ 20,500.00	\$ -
University - Energy	Completed	Solar/Net Metering Contract	Reduction in energy spend through credit earned from contractual support of solar development.	\$ 18,000.00	\$ -
University - Energy	Completed	Solar/Net Metering Contract	Reduction in energy spend through credit earned from contractual support of solar development.	\$ 1,500.00	\$ -
University - Energy	Completed	Solar/Net Metering Contract	Reduction in energy spend through credit earned from contractual support of solar development.	\$ 10,418.00	\$ -
University - Energy	Completed	Steam trap repair and replacement program	Replace approx 200 traps in Coburn and Mahoney and additional areas on north campus.	\$ -	\$ -
University - Energy	Active	System-wide bid process for natural gas supply.	System-wide bid process for natural gas supply.	\$ 541.00	\$ 185.00
University - Energy	Completed	Wind turbine project		\$ 125.00	\$ -

Amherst

Category*	Status	Project/Initiative Title	Project Description	Cost Savings	Cost Avoidance	Total Savings
Energy	Active	Central Heating Plant Gas Turbine Chiller Inlet System	A Gas Turbine Generator Inlet Air Chiller System has been installed for the Gas Turbine Generator located at the Central Heating Plant. This Inlet Air Chiller System will allow the Gas Turbine Generator to generate an additional 1 Mega Watt of electricity during hot and humid conditions. This system was made possible by a \$387,000 Leading by Example Clean Energy Grant from the Massachusetts Department of Energy Resources and a \$240,000 energy incentive from Western Massachusetts Electric Company.		1,440,000	1,440,000
Energy / Sustainability	Active	E Plus Project	FY 15 The Physical Plant worked with DCAMM and Northeast Utilities to develop an energy reduction project that has a total project cost estimate of \$4.5 million, with expected annual savings of \$1.2 million. Additionally, the project qualifies for over \$500,000 in rebates and annually reduces the University's air emissions by 6,920 MTCO2. The project will also address significant deferred maintenance issues by replacing outdated building energy system controls and repairing leaking steam systems.	1,200,000	3,600,000	4,800,000
Energy / Sustainability	Active	Solar Net Metering	The UMA has participated in two off site Solar Photo Voltaic (PV) Net Metering Projects. One project located in the Town of Whately and the other project located in the town of Hadley. These projects combine for a generation capacity of 3.9 MW (DC).	-	240,000	240,000
Energy	Active	WMECO Sustainability Report	Entered into a Memorandum Of Understanding with the Western Massachusetts Electric Company (WMECO) to provide a roadmap of sustainability support and the realization of established energy reduction goals for both the University and WMECO which will help reduce the University's costs, increase overall efficiency and improve building operations. WMECO's FY 15 committed Annual Incentive is \$608,000.		2,432,000	2,432,000
HR Processes	Active	Kuali Umass Ready ON-GOING	UMA continue to utilize Kuali "UMass" Ready in the system-wide business continuity planning tool paid by UMSO which used to develop business continuity plans for all administrative, academic and research departments.		46,000	46,000
HR Processes	Active	E-Builder Project Management	F&CS will be going live with the implementation of an E-Builder project management system resulting in improved business processes including electronic processing for project funding requests, procurement/purchasing and invoices.		40,000	40,000
HR Processes	Under Development	Upgrade Time Reporting and Billing	F&CS is working with A&F Systems on a project to upgrade and consolidate time & attendance and billing systems. This will reduce the number of systems and interfaces that are required to support F&CS departments and provide more efficient and consistent processes.	5,000	15,000	20,000
HR Processes	Under Development	Tririga O&M: Request Central feature	F&CS is working with A&F Systems on the implementation of the Request Central feature in Tririga Operations & Maintenance which will allow campus users to enter service requests directly into Tririga, thus eliminating double entry by work management staff.	15,000	45,000	60,000
HR Processes	Under Development	Tririga O&M: Keys module	F&CS is working with A&F Systems on the implementation of the Keys module of Tririga Operations & Maintenance which will provide for more efficient and effective management of the campus key request process. F&CS is pursuing the acquisition of more efficient key cutting technology to enhance the key request process and allow locksmiths to have more time in the field.	10,000	30,000	40,000
HR Processes		Rightsizing the Workforce through Downsizing and Vacancy Savings	The campus is focusing on insuring that its workforce is rightsized and that job duties are appropriately assigned. Vacancies are assessed prior to hiring by campus departments. Utilizing a variety of strategies, consolidating positions and redistributing functions as vacancies occur and right leveling of positions, the campus eliminated 16.25 FTE and changed the leveling for 2.00 FTE. In addition, the campus delayed the hiring of 14 FTE.	1,580,029	3,276,116	4,856,145
Information Technology	Active	Juniper Networks Equipment Donation for Advanced High-Speed Network	New funding: As part of a new strategic academic collaboration, Juniper Networks donated networking equipment with a list price of \$1.5 million to UMass Amherst. The campus will use the technology donation to build a dedicated high-speed network to support science research and increase the ease of use and speed of large academic data transfers across campus and to the Massachusetts Green High Performance Computing Center (MGHPCC) in Holyoke.		600,000	600,000
Information Technology	Active	Ebooks using Online Web-based Learning (OWL)	Ebooks using Online Web-based Learning (OWL)	300,000	900,000	1,200,000
Information Technology	Active	Improved Cellular Coverage at McGuirk Alumni Stadium	New funding: Verizon Wireless is providing a cell-on-wheels mobile cell site at no cost to the university to improve cellular coverage for football games at McGuirk Alumni Stadium. This constitutes a gift of over \$10,000.	10,000		10,000
Information Technology	Active	Class Automated Proposal System (CAPS)	CAPS enables academic departments to submit class information electronically for publication in the University's online Schedule of Classes. CAPS replaces a pen-and-paper process, providing a simple, efficient, and environment-friendly alternative that saves over 45,000 pages (more than 90 reams of paper) per year. To date the Registrar's Office has processed over 80,000 course scheduling requests from campus departments.	5,000	15,000	20,000

Information Technology		Efficiency Improvements through innovative use of software and technology to reduce staff and operating costs	38 efficiency improvement projects focused on efforts as diverse as food waste reduction to reducing the number telephones. Campus departments were able save or avoid costs by increasing the amount of service provided without adding costs, saving space costs by making it more contiguous, reusing equipment, reducing expenses, using technology for early identification of HVAC issues, purchasing energy efficient vehicles, implementing technological improvements in lieu of staff or infrastructure investments, utilizing grad students in sustainability and planning efforts, reducing utility costs through LEEDS construction, using in house staff instead of contracting out, using systems office software purchases, moving from paper processes to electronic processes, consolidating time and attendance and billing systems, integrating multiple data entry points into one, improving service delivery by revamping process or sharing services, and instituting energy savings improvements.	1,151,319	3,617,957	4,769,276
Purchasing		Chemistry Analyzer	Clinical Laboratory review of current chemistry testing will result in competitive contracting for a new clinical chemistry analyzer. Overall cost savings will be realized on the rental, service maintenance and reagent supplies.	30,000	90,000	120,000
Purchasing		Leased Campus Vehicle Program	Facilities & Campus Services entered into a leased vehicle program with Enterprise Fleet Management. This program will replace the aging Physical Plant fleet of vehicles as they come off line over a five year period with leased vehicles.	50,000	150,000	200,000
Purchasing		Competitive Contracting	The campus use of the competitive bidding process has resulted in significant cost savings and avoidance. The campus saved \$2,036,839 in energy costs through purchasing strategies, pre-purchasing fuel and energy credits. \$758,000 was saved through IT contract negotiations with Aruba, Cisco, EMC, Service Now, NetApp and Echo 360 which resulted in lower equipment and service costs. The bid for a new electronic health record system in UHS resulted in a \$250,000 savings. Another \$127,960 was saved through lower costs as a result of bidding. The campus avoided paying \$2,751,740 through negotiations with Verizon that resulted in support for signal boosters for campus community and free loaned equipment for graduation and football. \$4,293,290 in savings resulted from negotiations around network equipment and Juniper services. Another \$100,000 was avoided with the move to a fixed fee arrangement for attorney services in Technology Transfer Office.	9,636,089	4,724,988	14,361,077
Revenue Generating	Under Development	Campus Cell Coverage Improvements (DAS)	New funding: Starting in 2014, Verizon Wireless is compensating UMass Amherst for adding a cell phone Distributed Antenna System to campus buildings as a means to improve cellular service. Verizon customers are seeing immediate improvements in cell phone signal strength as a result.	100,000	300,000	400,000
Revenue Generating		Sponsorship and Corporate Partnerships	Adding sponsorship and other corporate partnership opportunities for vendors in RFB's as appropriate. Will increase student internships in 2015 & 2016 (Amazon = 375K; Coke delta from last contract \$210K; and Office Max = \$160K, Herman Miller = 50K)	795,000	3,180,000	3,975,000
Space & Building Efficiencies		Asbestos Abatement	EH&S working with D&CM Project Managers to use UMA contracts or in-house staff to abate asbestos and perform clearances prior to contractor bidding. With a new contract we can utilize most asbestos abatement types. Estimated reduction in cost of approximately 50% per job.	150,000	600,000	750,000
Space & Building Efficiencies		THIS IS COMPLETE Service Efficiencies - New Greenhouse	Physical Plant Landscape department will be adding a second greenhouse and will be able to grow more landscaping plants in house for use on campus versus purchasing at a higher cost from outside vendors.	7,500	22,500	30,000
Space & Building Efficiencies		THIS IS COMPLETE Admin Assistant Sharing	Campus Planning will share administrative assistant with FCS Admin Services and Transportation Services	35,000	105,000	140,000
Space & Building Efficiencies		Streamline processes through the use of technology and other resources allowing for better use of labor and space	From projects as small as \$5,000 for eliminating a double electronic entry process to as large as \$1,000,000 for eliminating the need for UMBA project managers on select campus projects, campus departments made great strides in streamlining 18 processes. Strategies included moving from paper to e-forms, developing a master agreements in UMII that reduced administrative time and increased start up, merging customer services functions into one area, integrating multiple data entry points into one, developing cost saving reporting systems, using existing staff in lieu of contracting, organizing inventory control and purchasing and improving payment methods.	1,039,500	2,131,000	3,170,500
Sustainability	Active	Increase Reclaimed Water Capacity	EH&S and PP working to increase reclaimed water capacity from 200,000 gpd to 350,000 gpd. After capital improvement costs, 100,000 gpd savings of potable water during cooling season April - October. Results in an annual savings of \$96,000	96,000	288,000	384,000
Sustainability	Active	Landfill Disposal	Modify disposal practices for autoclaved biological waste so that it can be disposed of in landfill rather than being incinerated. This proposal has received state department of public health approval	35,000	105,000	140,000
				16,250,437	27,993,561	44,243,998

Category*	Status	Project/Initiative Title	Project Description	Cost Savings	Cost Avoidance	Total Savings
HR Processes	Active	Telecommuting/Flex Time	Develop and implement policies on telecommuting and flex time for staff. The purpose is to provide flexibility in work schedules during this time of significant construction on campus.			\$0
HR Processes	Active	Implement best practices with on-line training programs	Implement on-line training programs in service areas, Procurement, Budget, Controller, Human Resources.		\$350,000	\$350,000
HR Processes	Active	Improvements to Hiring Process	Implementation of a new Hiring Policy.		\$500,000	\$500,000
Information Technology	Active	Document Imaging	Implement a document imaging system on campus in an effort to streamline administrative work and to provide for faster processing, streamlines processes, paper and space savings.		\$350,000	\$350,000
Information Technology	Under Development	R25 Live	Upgrade R25 system to R25 Live. The new system will offer enhanced services, unlimited users, system reliability, new features and functionality.		\$25,000	\$25,000
Information Technology	Active	Security Best Practices in Risk Management	Implement Security Best Practices in Risk Management - Conduct a risk assessment of our Information Security Environment starting with our networks and then moving to Web Applications and Desktop solutions.	\$100,000		\$100,000
Information Technology	Active	Acalog Online Course Catalogue	Implementation of an online course catalogue that will offer savings in printing, improved access, improved accuracy, integration and replacement of homegrown solutions.		\$180,000	\$180,000
Information Technology	Active	Computer Replace Program	Program to replace university PC's and laptop assets that are 4 years or older on a campus refresh model.		\$210,000	\$210,000
Information Technology	Active	iPad in classroom	iPad to be provided in the classroom for the College of Education, Academic Support and Library.	\$40,000		\$40,000
Information Technology	Active	Wireless network	Complete the campus wireless network redesign. New Contract with Extreme networks	\$40,000		\$40,000
Information Technology	Active	Installation of VoIP	Implementation of Voice over IP in the new Integrated Science Building. Replacing 200+ traditional phone lines with IP based connectivity	\$180,000		\$180,000

Category*	Status	Project/Initiative Title	Project Description	Cost Savings	Cost Avoidance	Total Savings
Information Technology	Active	Server Virtualization	Virtualized 40% of our servers - consolidating them onto one box		\$20,000	\$20,000
Purchasing	Active	Competitive procurement bidding for commodities	Competitive bidding, awarding of contracts to lowest bidder resulting in cost avoidances.		\$1,624,336	\$1,624,336
Purchasing	Active	BuyWays Catalog Expansion	BuyWays Catalog expansion, the expansion of catalog vendors.			\$0
Revenue Generating	Active	Facilities and Administrative (F&A) Rate Proposal and Projections	Develop Facilities & Administrative (F&A) "long-form" rate proposal and projections to maximize overhead recovery.			\$1,822,622
Administrative Practice	Under Development	Implementation of One Card system	Planning is underway for the implementation of a One-Card system that be inclusive of all service offerings on campus, dining, bookstore, library, parking. Etc.		\$100,000	\$100,000
Space & Building Efficiencies	Under Development	Renovations to Existing Buildings (REAB)	Major capital project to renovate existing academic buildings.			\$0
Space & Building Efficiencies	Completed	Centralized Scheduling	Studied and implemented a campus wide centralized scheduling model.	\$1,200,000		\$1,200,000
Space & Building Efficiencies	Active	Science Center Re-Use Policy	Develop and implement a policy for the temporary re-use of the existing Science Center as a result of faculty and staff who have moved to the new Integrated Sciences Complex.		\$960,000	\$960,000
Space & Building Efficiencies	Active	Improve physical access and security	Convert the campus to an Access Control system vs keyed system.		\$300,000	\$300,000
Space & Building Efficiencies	Active	Improved space management	Improved space management through active monitoring of space usage in order to identify space eligible for F&A or which could be re-allocated to address strategic priorities.		\$600,000	\$600,000
Space & Building Efficiencies	Under Development	Sodexo Capital Improvements	Capital investment in dining service facilities as per contractual agreement.		\$3,000,000	\$3,000,000
Space & Building Efficiencies	Completed	Follett Capital Improvements	Capital investment in bookstore s as per contractual agreement.		\$400,000	\$400,000
Utilities	Completed	Utility Plant MUA VFD,s	Existing MUA-1 provides make up air for boiler combustion and general exhaust in Utility Plant. This measure involves installing VFD to make up air fans controlling fan speed to maintain correct boiler room pressurization Received combined(\$128,522) incentive for items 21 & 22,23,24 & 25 included here.	\$128,522		\$128,522
Utilities	Completed	Boiler Draft Fan VFD's	Added VFD and associated air flow control to forced draft fans on 4 natural gas boilers	\$47,516		\$47,516

Category*	Status	Project/Initiative Title	Project Description	Cost Savings	Cost Avoidance	Total Savings
Utilities	Completed	Added Fire Hawk Control to four boilers	Added servo motor controls to four natural gas fired boilers, replacing linkage system. Allows for more precise control and eliminates hysteresis losses. Received incentive of \$22,622	\$57,308		\$57,308
Utilities	Completed	Variable Primary Chilled Water Distribution System	Added variable speed drives to primary chilled water system	\$88,852		\$88,852
Utilities	Completed	Variable Saltwater Cooling	Added variable speed drives to saltwater pumps in condenser water system	\$231,585		\$231,585
Utilities	Completed	Variable Boiler Primary Pumping	Added variable speed drives to boiler primary pumps	\$17,795		\$17,795
Utilities	Active	DCAMM AEP	Perform an AEP site energy audit.	\$620,000		\$620,000
Utilities	Active	National Grid Tariff Agreement	Negotiated with National Grid for the development and construction of an expanded gas distribution system.		\$1,362,500	\$1,362,500
Space & Building Efficiencies	Under Development	Parking Garage	Construction of a new parking garage.		\$750,000	\$750,000
Energy	Active	University Hall	Eversource Energy Efficiency incentives	\$77,688		\$77,688
Energy	Active	Natural Gas Cost Avoidance	Opposed an energy service provided and went directly to national grid as it was much more cost effective.		\$778,000	\$778,000
Information Technology	Active	Web Redesign	Redesign of www.umb.edu to responsive web design, new content, new navigation will provide ability to use any device, including handhelds. All design and development being provided by in house resources, not consultants as in the past.		\$100,000	\$100,000
Information Technology	Active	Storage Solution	Storage consolidation will eliminate "one offs" (tangible) and reduce the risk associated with not having continuity and security for the data (intangible).	\$75,000		\$75,000
Total				\$2,904,266	\$11,609,836	\$16,336,724

Category	Status	Project/Initiative Title	Project Description	Cost Savings	Cost Avoidance	Total Savings
Administrative Practices	Active	Centralization of AP	This project allows for improving internal controls through redeployment of resources. The Campus is transferring invoicing processing to the Central office.			
Administrative Practices	Completed	Paperless Travel				
Administrative Practices	Active	Multi-Print Device Initiative	Complete Analysis and Feasibility of Optimization of Print Devices on campus with mobile print capability. Through an inventory and operational analysis of print devices provide a report on the opportunity to the campus to reduce overall cost associated with printing on campus.		\$192,000.00	\$192,000.00
Administrative Practices	Active	IT Asset Management Redesign	Analysis cradle to grave of the management of IT assets to improve overall efficiencies, enhanced quality assurance and improved customer service for the life of IT Assets.		\$10,000.00	\$10,000.00
Administrative Practices		Student Billing, Payment System & Refund Process Improvements	eBilling Implementation: UMD began using eBilling functionality Fall 2012 which has resulted in a cost savings. The savings include reduction costs in postage, envelopes, and invoices. Here is an estimate of the cost savings by fiscal years for the items mentioned above: Fiscal 2013 – 38,986 less paper invoices generated estimated savings \$35,477.00 Fiscal 2014 – 38,763 less paper invoices generated estimated savings \$35,274.00 Fiscal 2015 – 42,549 less paper invoices generated estimated savings \$38,720.00 In addition to the cost savings referred to above, we also experienced a reduction in the person hours needed to prepare the invoices for mailing. Prior to Fall 2012, we would print each invoice on the Bursar's Office laser printer then using our folder/insertor each invoice would be folded and with a return envelope inserted into a window envelope. It took an average 3 days with most of the staff participating in this process to get Undergraduate invoices ready for mailing. Graduate and Law invoices due to the reduce number took less time but utilized the same procedure. Overall the implementation of eBilling was a positive change for the Bursar's Office as well as a cost savings for the campus.		\$240,000	\$240,000
Administrative Practices	Ongoing	Centralizing Conference and Events Services	Improve the utilization of conferencing space across campus. Enhance delivery of services and branding to events through the Conference Office. Reduce costs and increase revenues.		\$55,000	\$55,000
Administrative Practices (EEO/AA Processes and Policies)	Active	Title IX Compliance	System wide engagement of consulting firm, NCHERM, to assist campuses to ensure compliance with Title IX, including policies and investigative procedures.		\$20,000	\$20,000
Administrative Practices (EEO/AA Processes and Policies)	Active	Outsourcing AAP (Affirmative Action Plan) statistics	Through attrition and reorganization the allocation of a staff member to produce the reporting needs for the AAP this work has been outsourced to firm		\$5,000	\$5,000
Energy	Active	Distributed Steam and Condensate Line Replacements Steam Trap Survey	With some sections of the system reaching 50 years this project is working toward a complete campus steam and condensate line replacement and upgrade in which the oldest steam and condensate lines and manholes are replaced and/or upgraded. Both steam and condensate are leaking into the ground. >Replacement and Repair Steam and Condensate lines to mitigate water leakage into the ground >Engaged in a full campus inventory of steam traps to develop plan for repair / replacement. This will increase the efficiency of the system and reduce needless waste of steam and energy		\$300,000	\$300,000

Dartmouth

Category	Status	Project/Initiative Title	Project Description	Cost Savings	Cost Avoidance	Total Savings
Energy	Active	Energy Performace Project	The \$40M Energy Performance Project being implemented by NORESKO and managed through the DCAMM is a two phased infrastructure upgrade program and is aimed at improving the performance and efficiency of mechanical, electrical and plumbing systems while reducing the University's operating expenses and carbon footprint. o Phase I – Included eighteen energy conservation measures to address energy and water savings opportunities, the retrofit of existing lighting fixtures with new energy efficient lamps and ballasts, HVAC system upgrades and replacements, installation of new building management controls and major improvements to the plumbing infrastructure. The phase of the project is complete and is now in the operational phase. o Phase II – The construction of the 1.67 MW Kawasaki gas turbine based cogeneration system. The gas turbine generator will generate electricity to UMass-Dartmouth's electrical grid and hot gas exhaust to a Heat Recovery Steam Generator to produce steam for the campus. The gas turbine generator and heat recovery steam generator have been installed. The cogeneration system is undergoing a series of testing, commissioning and start up .	\$424,000	\$168,000	\$592,000
Human Resources	Active	New Hiring process through a Applicant Interview Exchange system	Implementation of a new Hiring proces through a cloud based software system Interview Exchange.			
Human Resources	Active	E-Forms Project	System-wide initiative is aimed at improving payroll transaction process efficiency and effectiveness. The E-Forms Project is no longer under development. It has been "live" for a number of years on the Dartmouth campus. The E-Forms technology eliminated a manual paper-based process by replacing our paper Personnel Action Form with an electronic form. The HR staff enter transactions into EPAF which is routed electronically with workflow to fiscal/budgetary and payroll staff. This eliminates the need to track down paper forms and also eliminates duplicate data entry efforts which leads to a more accurate and efficient HR/Payroll operation.			
Human Resources	Active	Organizational/Departmental R	Multiple HR initiatives to support departmental reorganizations which result in organizational structures and staffing better suited to meet operational needs.			
Human Resources	Active	Streamline the Part time Lecture hiring process	Streamline the Part time Lecture hiring process (time spent reviewing the process vs the amount of actual staff hired) the Part time Lecture is hired faster will assist in the number of classes offered) A College Dean with advice of department may hire PTL without involvement of EEO (no charge, no EEO Assurance Form/EEO sign-off); Hiring paperwork for PTL's sent directly to HR			
Information Technology	Under Development	Improve physical access and security	Installation of an access control system door hardware and Camera Surveillance . Systems installed in new construction facilities, 125 camera installations in funnel point location in Residential, Campus life, Academic facilities. Card access installation Library renovation project to allow for monitored 24/7 access	\$15,000		\$15,500
Purchasing	Active	Negotiations Contracts			\$620,080	\$620,080
Purchasing	Active	Bidding Cost Savings			\$1,274,000	\$1,274,000
Purchasing	Under Development	Labor Construction Electronic Specification & Bid Document Development	Implement BidDocs Online, Incs "SmartSpec" module for the electronic development and management of labor construction design specification and solicitation documentation. The objective is to improve quality assurance, reduction of cycle times and improve efficiencies.		\$11,300.00	\$11,300.00
Revenue	Active	Vendor Revenue Contractual agreements				\$5,319,770

Category	Status	Project/Initiative Title	Project Description	Cost Savings	Cost Avoidance	Total Savings
Space & Building Efficiencies	Substantially Completed	The construction of a new Center Loading dock and Freezer and cold storage building	<p>New Center Loading dock and Freezer and cold storage building addition provides the campus and dining services program with:</p> <ul style="list-style-type: none"> - new freezer and cold storage building in process, approximately 1200 sf - helps eliminate staging of storage which in turn allows for bulk buying creating a cost savings to the University. - A dock that has a turning radius for large trucks that did not exist before which will eliminate the safety hazard of turning around in parking lot 6 - added one additional bay for truck staging that creates less congestion and safer deliveries - increased loading dock storage capacity by 5 times the original dock size - provided for exterior cardboard recycling - new Handicap accessible ramp - new freezer and cold storage building in process, approximately 1200 sf - helps eliminate staging of storage which in turn allows for bulk buying creating a cost savings to the University. - safer working environment for employees <p>• Reduce overtime costs through the expansion of the loading dock allowing deliveries throughout the day. Additional freezer/cooler space allows for increased purchasing of food products at a reduced costs.</p>		\$133,000	\$133,000
Strategic Reallocation	Completed	Outsourcing bookstore	<p>Increased revenue through a commission realted contract with Follett. Reduced liability on university operation. Reduction of salaries to the university operation.</p>		\$575,000	\$575,000
Strategic Reallocation	Active	Update Campus Master Plan	<p>In conjunction and funded through the Division of Capital Asset Management and Maintenance (DCAMM) through the Designer Selection Board (DSB) have retained the design team of designLab and Ayers Saint Gross to develop a comprehensive Campus Master Plan Update:</p> <p>Goals:</p> <ol style="list-style-type: none"> 1. Verify and validate the space needs of all academic programs. 2. Propose means to modernize facilities in response to evolving pedagogies and demands for research space. An example of this is the renovation of the Carney Library which was repurposed as a campus community gathering point. 3. Enhance the aesthetics of the campus without diminishing the strong architectural style of the Paul Rudolph buildings. 4. Generate a phased implementation plan that will enable continued growth of the student population and the expansion and development of the full range of UMass Dartmouth's diverse academic programs, community outreach programs, on-campus housing for graduate and undergraduates, research programs, and its industry and business partnerships for the near future. 5. Provide a well-documented framework that explains the variables that need to be considered relative to the proposed prioritization of projects in order for the University to fully understand the ramification of potential options in its decision making process. This Master Plan will 			
TOTAL				\$ 439,000	\$ 3,603,380	\$ 4,042,880

Category*	Status	Project/Initiative Title	Project Description	Cost Savings	Cost Avoidance	Total Savings	Soft Benefits**
Energy	Active	Utility Accounts	1) The University has increased its commitment to net metering credits to 9.6MW DC as host and 6.3 MW DC as non-host. Combined, this will reduce our annual cost of electricity by approx. \$900,000 annually for the next 20 years starting June 24, 2014 as all systems have been completed and are operating. 2) The Administration and Finance and the Energy Conservation and Projects Subcommittee created a Parent Energy Project account		\$20,000,000	\$20,000,000	1) Helps green the power grid for C Of MA 2)Funds to save on future energy projects 3)Contractor incentivized to conserve utilities. Reduces our utility costs.
Energy	Active	Lighting	1) Southwick Occupancy Sensors 2)Replace South Campus Outdoor Lighting with LED 3)Upgrade Lighting with High Efficiency/Replace T12 in corridors and classrooms. (For Ball, Lydon, Olsen, Olney, Weed). Exclude 1st Floors of Olsen and Lydon) 4) Cummock: Upgrade Lighting with High Efficiency 5) North Fields Lighting Controls 6)Costello: rear and side of building overhang lighting conversion to LED or other high efficiency. Needed for safety as well. 7) Tsongas Exterior Lighting Replacement with LED		\$70,000	\$70,000	1) Improve light level in street and parking lots & reduce electrical maintenance & GHG Emissions 2) reduce electrical maintenance and improve light level and GHG emissions 3) Automatically shuts off light reducing light pollution. 5) Safety Illumination 6) Improve light level in street and parking lots & reduce electrical maintenance & GHG Emissions
Energy	Active	Utility Accounts (HVAC, Steam, Water) including Meter Reclamation	1) Cooling tower water metering installation at all towers - incomplete 2) Change showerheads & faucet aerators: CRC, Mahoney, Boathouse, Costello 3)Install weather-stripping at exterior doors 4) Steam Piping Insulation 5) Study and Execution ICC: Controls and HVAC VAV for common areas, HVAC system	\$0	\$471,000	\$471,000	1) Increased comfort, ease of operatio; 2) Reduce energy during peak load days; 3) Reduce load on boilers; 4) Reduce GHG emissions
Energy	Active	AEP Accelerated Energy Program	\$26.6 Million Performance Contract geared to renewing the UMass Lowell campus infrastructure of MEP equipment, systems and Controls to reduce energy usage by 25% minimum.		\$30,000,000	\$30,000,000	Reduce GHG emissions.
Energy	Active	Commissioning & retrocommission 1-ICC HVAC Units on low roof; 2-HSSB; 3-labs ETIC Bldg	1-Update controls and HVAC units to take advantage of energy efficiency opportunities; 2-Datamining of the control system to understand and solve control and device issues; 3-Change operations of all the hoods in the ETIC building to operate more efficiently.	\$0	\$1,250,000	\$1,250,000	Reduce air noise, increase ventilation and safety, control and comfort; maintenance
HR Processes	Active	Organizational/Departmental Restructuring; Essential Hiring Committee; Second Shift	1. Multiple HR initiatives to support departmental reorganizations, e.g., Athletics, IT, Solution Center, which result in organizational structures and staffing better suited to meet operational needs. 2. Implementation of 2nd Shift for Facilities Staff reducing Overtime; 3. New Essential Hiring process established resulting in staff position eliminations, reallocations and deferrals			\$0	
HR Processes	Under Development	Workforce Management and Collective bargaining "wins"	(1) Modifications to employee spouse/dependent tuition benefits; (2) universal adoption of staff performance planning and management program across all staff unions (3) agreement with MSP faculty union on development and on-going review faculty workload agreements; (4)			\$0	Improved management and reporting of faculty/staff FTEs; increased opportunities for strategic faculty hiring; improved performance planning and accountability
HR Processes	Under Development	E-Forms Project	System-wide initiative is aimed at improving payroll transaction process efficiency and effectiveness. The Lowell campus has implemented E-Forms across all units except for grant-funded transactions. We expect to roll out e-forms with Principal Investigators in spring 2015.			\$0	Improved effectiveness and efficiency in processing of hiring and other personnel transactions.
Information Technology	Completed	Student Billing, Payment System & Refund Process Improvements	Student financial management improvement providing additional payment options for students and reducing campus processing costs: 1. Direct deposit of financial aid refund checks; 2. Accepting e-checks for student tuition, fee and room and board payments; 3. Outsourcing credit card processing for student tuition, fee and room and board payments; 4. improved access for students to student billing information on is.	\$600,000	\$1,800,000	\$2,400,000	
Information Technology	Completed	IT Maintenance Contracts	Renegotiated annual contract for the hardware & Software support of installed UMass Lowell telephony equipment and firewalls.	\$39,051		\$39,051	
Information Technology	Completed	Virtual Desktop Deployment	Replacement of lab/library PCs with zero footprint VDI terminals	\$65,000		\$65,000	Anytime, anywhere access of lab resources
Information Technology	Active	Document Imaging	Business automation project. Re-engineer document intensive business processes leveraging workflow and integration. Undergraduate Admissions complete. Financial Aid underway.	\$57,000		\$57,000	Improved customer service; faster turnaround on decisions.
Purchasing	Under Development	Core, Aggregate and Edge Switch Equipment & Maintenance	Multi-year replacement of Core, Aggregate, and Edge Switching on campus. Negotiation ongoing with supplier. Equipment savings from contract pricing and previous bid. Maintenance savings from quoted price.	\$2,130,200	\$6,396,000	\$8,526,200	
Purchasing	Active	Aramark Capital Investment	Capital investment - supports McG and University Crossing	\$10,000,000		\$10,000,000	
Purchasing	Active	Aruba wireless	Renegotiated contract increasing our discount off of list price from 45% to 65.5% with our initial order getting a 68.5% discount.	\$527,000		\$527,000	
Revenue Generating	Active	Entrepreneurial Revenue	Campus Revenue Generation efforts include: 1. Hospitality & Events Services - new unit focused on maximizing the use of facilities throughout the year (e.g. summer camps and conferences, private events); 2. Implemented a corporate sponsorship model for M2D2 and Innovation Hub				

Category*	Status	Project/Initiative Title	Project Description	Cost Savings	Cost Avoidance	Total Savings	Soft Benefits**
Space and Building	Active	Project Management Processes and Design Efficiencies	Development of Standard Operating Procedures such as Move Coordination Process including - Move Matrix, Move Notification Process, and Move Coordination SOP; Hardware Procurement Procedure, etc. Development of design standards for capital projects reduces the time for design development and review. Allows campus to meet aggressive schedules and complete work within a more compressed timeframe. Enables more consistent material installation of the desired quality, improving maintenance and replacement procedures as well. Design House Doctors Symposium to improve efficiency and consistency of design process on every capital project requiring design.			\$0	Customer Service, Improvements, Productivity Improvements, Equipment/Svc Standardized, Customer Service, Improvements, Productivity Improvements
Strategic Reallocation	Active	Campus Security Cost Reduction	Outsource campus security officer positions with contract security officers	\$470,000	\$457,000	\$927,000	Reduction in administrative processes within the department as well as human resources ,payroll department and benefit allocations.
Strategic Reallocation	Active	Furniture Re-Use, Re-Purposing, and in-house design and layout	Re-using existing furniture by reallocating elsewhere on campus instead of purchasing new. Purchased refurbished furniture from vendors such as R-Squared and Patriot Warehouse. Refurbished furniture is about 1/4 the cost of buying the same furniture new. Use of in house expertise to provide space and furniture layouts, design and finishes consultation. In house staff can provide information more efficiently, consistently and cost effectively than employing outside design consultants.		\$4,075,000	\$4,075,000	Customer Service, Improvements, Productivity Improvements, Reduction in suppliers
Strategic Reallocation	Active	Emergency Preparedness	Though completion and FEMA acceptance of a Hazardous Mitigation Plan, UMass Lowell secured a federal FEMA Grant to install Emergency generator for student shelter in place at Recreation Building. Installation of card access devices onto high hazard and high security doors on campus. Install exterior and interior surveillance cameras throughout campus.	\$125,000	\$300,000	\$425,000	
Sustainability	Active	Waste Reduction, Reuse & Recycling Initiatives	1. Solid Waste and Recycling multi-year awarded contract - Bid to manage campus wide trash removal, recycling and food composting program. 2.Secured Federal grant for radiological waste disposal. 3. Reuse of student residential goods (cloths, furnishings, food, electronics) to local non profits, reuse of office furnishing through resale broker, recycle food waste to compost and food diversion programs	\$373,000	\$490,000	\$863,000	
	Active	Enterprise Risk Management	Campus ERM initiatives include:1. Revised Revenue Control procedures and training program to improve revenue collections; 2.Campus Policy Committee reviewing, revising and standardizing all campus policies: 3.comprehesive Records Management program; 4.comprehensive IT Security program; 5.campus Safety, Security and Access program				
TOTAL				\$14,386,251	\$65,309,000	\$79,695,251	

Medical School

Category*	Status	Project/Initiative Title	Project Description	New Costs	Cost Savings	Cost Avoidance	Total Savings
Energy	Active	Sale of APS credits	Throughout the programming and design of the central power plant expansion project, equipment was selected for capacity, efficiency, redundancy and cost effectiveness. Under the 2009 Green Communities Act and working with the DOER, we are able to create and sell energy efficiency		\$7,500,000.00		\$7,500,000.00
Energy	Completed	Laboratory Ventilation Optimization	The optimization study and retrofit in the 370,000 sf Lazare Research Building was completed in 2014. The project included testing and balancing of the building automation	\$1,800,000.00	\$2,800,000.00	\$400,000.00	\$1,400,000.00
Energy	Under Development	Power Plant dynamic equipment dispatching	Converging process analytics, real time energy market positions and plant equipment optimization protocols; a dynamic and predictive plant equipment line up will provide additional energy efficiencies and cost saving opportunities. UMMS is working with ICETEC, Industrial/Commercial Energy Technologies to converge market trading, process control and internet technologies to potentially achieve over 10% in both energy consumption and cost reductions.		\$1,000,000.00		\$1,000,000.00
Energy	Active	Building management systems analytics and fault diagnostics.	Starting in 2012, UMMS has contracted with IDS (Interval Data Systems, Waltham Ma) through a DCAMM contract to provide building management systems analytics and fault diagnostics. By real time comparison of the building's mechanical system basis of design and sequence of operations, IDS monitors the facility for occupant comfort and equipment operational effectiveness and identifies specific component variances not meeting requirements.	\$184,000.00	\$670,000.00		\$486,000.00
Energy	Under Development	BioTech Energy Study	An energy study of the five Biotech buildings totaling over 500,000 square feet began 2015. The Demand Ventilation Assessments are a follow up the the Rapid Energy and Safety Assessment completed in late 2013. The study is partially funded by Ngrid and performed by ECT, Inc. of Cary, NC will provide a list of energy conservation opportunities. We expect a larger majority of these ECOs	\$100,000.00			-\$100,000.00
Energy	Under Development	School and Hospital AEP	Through DCAMM's Accelerated Energy Program, B2Q Consultants has been hired to develop a comprehensive energy audit and determine energy savings opportunities for over one million square feet of facilities.				\$0.00
Energy	Completed	ASC Retro Commissioning	The Albert Sherman Center underwent retro-commissioning as a means to verify building systems and equipment are functioning as designed. Through the process four major ECMs were identified: (1) reduce enthalpy wheel speed to 0 Hz and install modulating bypass dampers, (2) optimize enthalpy wheel modulation sequence and maintain 58°F discharge air temperature (3) reduce CFM to the office spaces, and (4) reduce CFM in the office spaces to 0 CFM during unoccupied mode. Retro-commissioning was partially funded by Eversource.	\$52,000.00	\$822,000.00		\$770,000.00
Energy	active	Net Metering Credits	UMMS entered into 3 Net Metering Credit Purchase Agreements (NMA) through an aggregated five campus procurement process. These NMAs are structured as a fixed discount from the utility rate over a 30 year term in which the public entity receives 100% of the value of the net metering credits on their utility bill and pays the project owner a fixed percentage of that value.		\$2,680,000.00		\$2,680,000.00
HR Processes	Active	Equifax / Tax Implementation	Implement Tax service which will automate employment verifications and Immigration status letters. <u>Note: Expanded to extend over ALL campuses as of January 2016</u>			\$63,215.00	\$50,572.00
HR Processes	Completed	New Hire Onboarding	Incorporate the new hire and benefit information into the ICIMS (Recruiting) onboarding portal electronically		\$28,920.00	\$43,380.00	\$72,300.00
HR Processes	Completed	FNIS Implementation	Implement a self service module in Tax Navigator - to be used by all employees on Visas		\$15,374.00	\$23,061.00	\$38,435.00
HR Processes	Active	Sunopsis implementation	Design and implement an electronic solution that captures all immigration case data improving compliance and case management activities		\$30,000.00	\$7,500.00	\$37,500.00

Medical School

Category*	Status	Project/Initiative Title	Project Description	New Costs	Cost Savings	Cost Avoidance	Total Savings
HR Processes / Information Technology	Active	Electronic Employee Records	Implement an electronic storage and retrieval application to replace manual filing systems for employee records		\$75,000.00	\$0.00	\$75,000.00
HR Processes / Information Technology	Active	Summit Reporting Expansion	Consolidate, design and build reports in Summit replacing dozens of manual reports each week. Creates a 'what you want - when you want it' self service environment which expands customer service while reducing costs		\$50,000.00	\$188,477.00	\$238,477.00
Information Technology	Active	Data Center Optimization	Consolidation of data center infrastructure between the Boston, Dartmouth, Lowell and Worcester campuses in the Shrewsbury data center	\$4,460,000.00	\$3,619,000.00	\$1,400,000.00	\$559,000.00
Information Technology	Under Development	email migration to Office 365	This project avoids an internal infrastructure upgrade for hosting email services by migrating to Microsoft's Cloud Solution. The introduction of Instant Messaging (Skype for Business) is part of this project.			\$1,250,000.00	\$1,250,000.00
Information Technology	Completed	Storage for Science	This project establishes a "storage core" service for resesarchers. It helps IT avoid costly storage while also pushing accountability for usage to research labs	\$0.00		\$1,500,000.00	\$1,500,000.00
Purchasing	Active	Consolidate research equipment maintenance services	Consolidation of research equipment maintenance contracted through SUGroup to replace service agreements from individual original equipment manufacturers		\$139,000.00	\$416,000.00	\$555,000.00
Revenue Generating	Active	Tuition Retention - Clinical Years	After review of State Auditor's report and consultation with General Counsel, the President's Office has determined that tuition received for classes taught by non-state funded personnel is not required to be remitted	\$0.00	\$12,320,000.00		\$12,320,000.00
Space & Building Efficiencies	Active	Sell Century Drive Building	Gain on sale of asset in year of sale, and ongoing O&M savings	\$0.00	\$5,667,000.00		\$5,667,000.00
Space & Building Efficiencies	Completed	Relocation / consolidation of MassBiologics manufacturing operations from Jamaica Plain to Mattapan			\$10,625,000.00		\$10,625,000.00
Space & Building Efficiencies	Completed	Relocation of Shriver Center from Waltham to main campus			\$1,902,000.00		\$1,902,000.00
Strategic Reallocation	Active	Reduced executive compensation plan	UMMS has reduced the number of participants by 65% and for the remaining participants, reduced the potential awards by 5%	\$0.00	\$6,468,409.88		\$6,468,409.88

Medical School

Category*	Status	Project/Initiative Title	Project Description	New Costs	Cost Savings	Cost Avoidance	Total Savings
Strategic Reallocation	Completed	IT Strategic Re-alignment for the Medical School	The project consisted of eliminating 43 positions and creating 39 new positions with re-defined roles out of a total department of approx. 175.		\$0.00		\$0.00
Sustainability	Active	Recycling	Working collaboratively with UMass Memorial Medical Center and the associated partner hospitals, UMMS developed a consolidated contract for recycling and refuse disposal for over 65 locations throughout central Massachusetts. With over a \$600K annual spend, anticipated savings are \$30K to \$60K per year as recycling continues to increase. The contract stipulates a resource management effort to increase recycling, educate the		\$240,000.00	\$73,000.00	\$313,000.00
Total				\$6,596,000.00	\$56,651,703.88	\$5,364,633.00	\$55,407,693.88