

Board of Trustees 15 Estabrooke Drive Orono, ME 04469

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January 18, 2018

TO: Members of the Board of Trustees Faculty and Student Representatives

FR: Ellen N. Doughty, Interim Clerk of the Board

RE: January Board Meeting

The University of Maine

University of Maine at Augusta

University of Maine at Farmington

University of Maine at Fort Kent

University of Maine at Machias

University of Maine at Presque Isle

> University of Southern Maine

Enclosed are the materials for the **Board of Trustees Meeting** on **Sunday and Monday**, **January 28 & 29, 2018**, hosted by the University of Maine System at the **University of Maine**. Directions are included in the Board meeting materials.

The Board Meeting materials are available on the Diligent portal, for those who have access, and in PDF format on the Board of Trustees website at:

www.maine.edu/UMStrusteesmeetings

Live audio streaming will be available for the Board meeting on Sunday and Monday. The links to the live streaming and the captioning are on the Board of Trustees website at: www.maine.edu/board.

On Sunday, January 28<sup>th</sup>, the Board meeting will be called to order at 10:00 am. The Board will go directly into an Executive Session for the remainder of the day. There will be a reception and dinner for those participating in the Executive Session. Details will be distributed separately. The meeting on Sunday will be in Room 253 of Estabrooke Hall in Orono.

On Monday, January 29<sup>th</sup>, the Board meeting will reconvene at 9:00 am with an opportunity for continental breakfast and networking starting at 8:30 am. The Board meeting on Monday will be in Room 1 in the Wells Conference Center in Orono. Parking will be available in the Dunn parking lot.

Meeting rooms have been reserved for the Faculty & Student Representatives if they would like to meet in their respective groups. The Faculty Representatives can meet in Room 2 in Wells Conference Center. The Student Representatives can meet in Room 3 in Wells Conference Center. These rooms are available starting at 8:00 am on 1/29/18.

Overnight accommodations for those that have requested, have been made at the Courtyard Marriott, 236 Sylvan Road, Bangor - 262-0070.

Incoming messages can be left with the UMS Chancellor's Office at 973-3220 or with Ellen Doughty at 949-4905.

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In the event of a postponement, cancellation, or changes in the Board of Trustees meeting, a message will be recorded on the Board Office telephone (581-5844). In addition, every effort will be made to personally contact the Board of Trustees, the Presidents, and the Faculty and Student Representatives.

Encl.

cc: Chancellor James H. Page University Presidents System Staff **UMS Board of Trustees Meeting** 

University of Maine System Wells Conference Center, Orono

**REVISED** 1/26/18

January 28 & 29, 2018

#### **AGENDA**

Meeting Room for Faculty Representatives – Room 2, Wells Conference Center Meeting Room for the Student Representatives – Room 3, Wells Conference Center (*These rooms are available starting at* 8:00 am on 1/29/17.)

#### Sunday, January 28,2018 - Room 253, Estabrooke Hall, UMaine, Orono

Call to Order @ 10:00 am

The Board will go directly into executive session. There will be a reception and dinner for attendees of the executive session.

5:00 pm - Reception at the Diagnostic Research Lab (DRL), 17 Godfrey Drive, Orono (cash bar)

6:00 pm - Dinner at the Diagnostic Research Lab (DRL), 17 Godfrey Drive, Orono

#### Monday, January 29, 2018 - Room 1, Wells Conference Center

Coffee & Networking @ 8:30 am

Call to Order/Reconvene @ 9:00 am

#### **Citizen Comment**

The Board of Trustees provides time for citizen comment prior to the business agenda at each meeting. The Chair of the Board will establish time limits (usually three minutes per person) and determine any questions of appropriateness and relevancy. Personnel decisions, collective bargaining issues, grievances, litigation and other areas excludable from public discussion under the Maine Freedom of Access Law shall not constitute appropriate matters for such input. A person who wishes to speak during the citizen comment period should arrive prior to the meeting start time and sign up on a sheet provided, indicating name and topic of remarks.

#### **Acceptance of Minutes**

#### **Committee Reports/Actions (30 minutes)**

Academic & Student Affairs Committee Meeting (1/19/18) (5 minutes)

Executive Committee Meeting (12/7/17) (5 minutes)

Finance/Facilities/Technology Committee Meeting (1/12/18) (5 minutes)

Investment Committee (12/5/17) (5 minutes)

UM Presidential Search Committee Update (10 minutes)

#### Chair's Report (10 minutes)

- Certificate of Appreciation for Kim Miner, Graduate Student Representative from UM
- Update on the Ad Hoc Committee on Board Governance and Structure

Chancellor's Report (20 minutes)

Vice Chancellor for Finance and Administration & Treasurer's Report (30 minutes)

Tab 1 - Financial Update

#### **Vice Chancellor for Academic Affairs' Report (30 minutes)**

Tab 2 - Vice Chancellor for Academic Affairs Update

#### **Discussion Items**

- Tab 3 Update on Strategic Resource Allocation Plan (SRAP) Progress (15 minutes)
- Tab 4 UMaine 4-H STEM Ambassadors Update (10 minutes)
- Tab 5 Review of Proposed New Board Policy 214 Institutional Authority on Political Matters (30 minutes)
- Tab 20 UMaine & USM Capital Campaign Updates (10 minutes)

#### **Action Items**

- Tab 6 Approval of Revised Board Policies 404.4 and 404.5 Terms of Appointment and Benefits for Presidents and Chancellor and University of Maine System Professor, Researcher, or Administrator (10 minutes)
- Tab 7 Confirmation of Faculty and Student Representatives to the Board of Trustees (5 minutes)
- Tab 8 Confirmation of Appointment to the UM Board of Agriculture (5 minutes)
- Tab 9 Approval of the 2017 Maine Economic Improvement Fund Report (15 minutes)

#### Consent Agenda (10 minutes)

Action items from the January 12, 2018 Finance, Facilities & Technology Committee Meeting:

- Tab 10 Naming, Cooperative Extension Diagnostic and Research Laboratory, UM
- Tab 11 Preliminary Space Reduction Initiative Approval, UMS
- Tab 12 Schematic Design Center for the Arts at USM

#### Ratification of Action Items from the 12/5/17 Investment Committee Meeting (5 minutes)

- Tab 13 Defined Contribution Plan Vendor Fee Update
- Tab 14 Mid Cap Growth Manager Review Defined Contribution Plan
- Tab 15 FY2019 Endowment Spending Rate

Date of the Next Meeting: March 18 & 19, 2018 at the University of Southern Maine

Lunch Break (20 minutes)

Executive Session (2 1/2 hours) – Room 1, Wells Conference Center

Following the Executive Session, the public meeting will be reconvened to vote on the following item:

#### **Action Item**

- Tab 16 Honorary Degree Nominations for 2019
- Tab 17 Approval of Tenure at the time of hire, UMM
- Tab 18 Approval of the Collective Bargaining Agreement, AFUM
- Tab 19 FY18 & FY19 Compensation and Benefit Changes for Non-represented Employees
- Tab 21 Approval of the Collective Bargaining Agreement: Fraternal Order of Police, Lodge #100

#### Attachments & Reports:

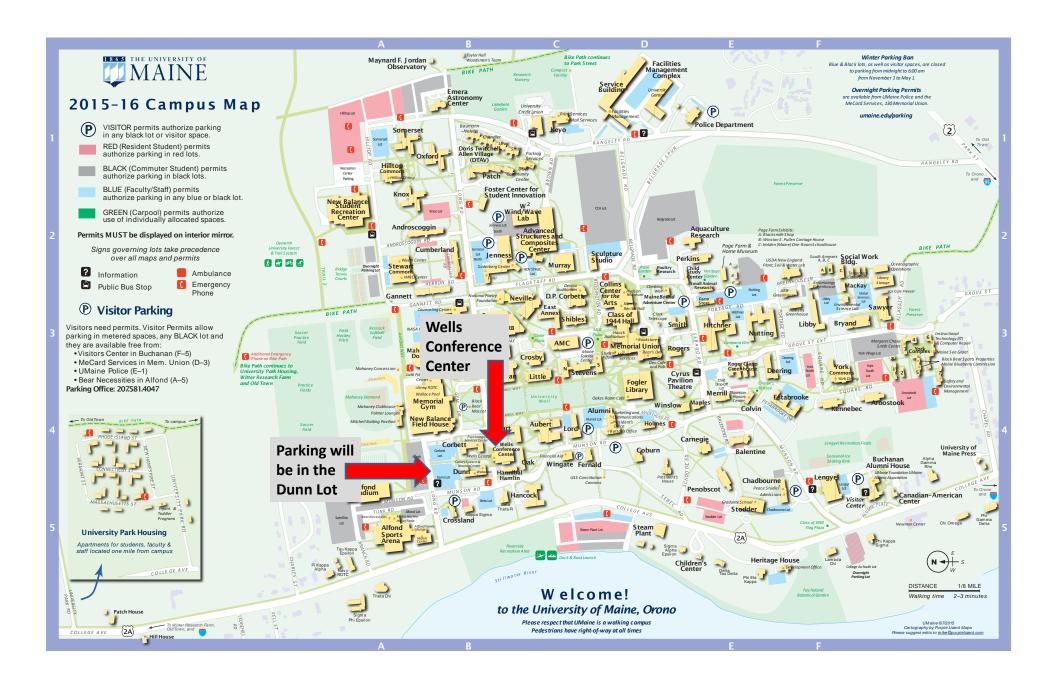
- A Financial Update Flash Reports
  - Managed Investment Pool
  - Pension Fund
  - Operating Fund
- B Vice Chancellor for Academic Affairs Report
  - Academic Affairs Update
  - Early College Update
- C UMaine 4-H STEM Ambassadors Update
- D Board of Trustees Policy 214 Revised Draft
- E Board of Trustees Policies

- Board Policy 404.4
- Board Policy 404.5
- F UM Board of Agriculture Appointment
- G 2017 Maine Economic Improvement Fund Annual Report
- H DC Plan Mid Cap Growth Manager Comparison
- I FY2019 Endowment Spending Rate
  - FY2019 Endowment Spending Rate NACUBO Commonfund Study
  - FY2019 Endowment Spending Rate MIP Assumption
- J- Capital Projects Status Report
- K Agenda Calendar
- L 2016-2017 Annual Report on Degrees Conferred

#### **Presentations:**

#### Tabs noted in red text are action items.

Note: Times are estimated based upon the anticipated length for presentations or discussion of a particular topic. An item may be brought up earlier or the order of items changed for effective deliberation of matters before the Board.



### **Acceptance of Minutes**

The following minutes will be presented to the Board of Trustees for approval at the January 29, 2018 Board meeting:

November 18-19, 2017 - Board of Trustees Meeting
December 5, 2017 - Investment Committee Meeting
December 7, 2017 - Executive Committee Meeting
January 12, 2018 - Finance, Facilities, Technology Committee Meeting
January 19, 2018 - Academic & Student Affairs Committee Meeting

#### **Board of Trustees website link to the minutes:**

http://www.maine.edu/about-the-system/board-of-trustees/meeting-minutes/



1. NAME OF ITEM: Financial Update

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: X BOARD ACTION:

4. OUTCOME: BOARD POLICY:

Enhance fiscal positioning

5. BACKGROUND:

Vice Chancellor for Finance and Administration and Treasurer Ryan Low will provide a brief update at the January 29, 2018 Board of Trustees meeting.

Attachments & Reports:

Financial Update Flash Reports
Managed Investment Pool
Pension Fund
Operating Fund



1. NAME OF ITEM: Vice Chancellor for Academic Affairs Report

**2. INITIATED BY**: James H. Page, Chancellor

3. BOARD INFORMATION: X BOARD ACTION:

4. OUTCOME: BOARD POLICY:

All Primary & Secondary Outcomes

5. BACKGROUND:

Dr. Robert Neely, Vice Chancellor for Academic Affairs, will provide an update on Academic Affairs.

Attachments & Reports:

Academic Affairs Update Early College Update



- 1. NAME OF ITEM: Update on Strategic Resource Allocation Plan (SRAP) Progress
- 2. INITIATED BY: James H. Page, Chancellor
- 3. BOARD INFORMATION: X BOARD ACTION:
- **4. OUTCOME: BOARD POLICY:** All Primary & Secondary Outcomes Apply
- 5. BACKGROUND:

Vice Chancellor for Finance and Administration and Treasure Ryan Low and Vice Chancellor for Academic Affairs Robert Neely will provide an update regarding SRAP at the January 29, 2018 Board of Trustees meeting.

# Board of Trustees January 29, 2018

## **Board of Trustees Accountability Data Dashboard link:**

https://sites.google.com/maine.edu/umsdashboard/main



1. NAME OF ITEM: UMaine 4-H STEM Ambassador Program Update

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: X BOARD ACTION:

4. OUTCOME: BOARD POLICY:

Increase Enrollment
Improve Student Success and Completion
Support Maine through Research & Economic Development

#### 5. BACKGROUND:

UMaine Provost Jeff Hecker will provide an overview of the 4-H STEM Ambassador Program.

Attachments & Reports:

4-H STEM Ambassador Program



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#### AGENDA ITEM SUMMARY

1. NAME OF ITEM: Review of Proposed New Board Policy 214 – Institutional Authority

on Political Matters

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: X BOARD ACTION:

4. OUTCOME: BOARD POLICY:

Increase Enrollment
Improve Student Success & Completion
Enhance Fiscal Positioning

#### 5. BACKGROUND:

In December 2016, the University of Maine System Board of Trustee Executive Committee charged an ad hoc committee to review and recommend, as it deemed necessary, changes to Board and System policies on freedom of speech, civility, and political impartiality. The committee, consisting of Trustees Erwin and Johnson, Presidents Cummings and Huseman (then President of the University of Maine at Machias), and the Chancellor and Chief of Staff (COS) and General Counsel Thelen, proposed and the Board adopted, at its March 2017 meeting, changes to Board Policy 212 to address freedom of speech, academic freedom, and civility issues.

The ad hoc committee, with President Foster replacing former President Huseman in July 2017, continued its work to develop appropriate guidelines for institutional political activity and impartiality. The committee convened via conference call in May, August, and October 2017 to discuss the developing draft policy, which Chancellor Page and Chief of Staff and General Counsel Thelen reviewed on a monthly basis, beginning in February 2017 and through this month, with the Presidents' Council.

Based on the above-described policy development work, COS and General Counsel Thelen presented at the November 2017 Board meeting a draft proposed new Board policy, "Institutional Authority on Political Matters." COS and General Counsel Thelen also met in advance with the Board's Student and Faculty Representatives to discuss the proposed policy and answer questions. Board of Trustee Faculty Representatives requested that the Board permit further discussion of the policy at the January 2018 Academic and Student Affairs Committee meeting, to be informed there as well by additional input from campus faculty bodies through the Board Faculty Representatives in the time since the November 2017 Board meeting. COS and General Counsel Thelen will lead discussion of the additional faculty input received to date as well as whether additional changes to the proposed policy should be considered in light of this faculty input at the ASA meeting and again before the full Board. Given the ongoing faculty

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engagement, it is expected the Board will limit its action on the proposed policy to further discussion only, but consider the policy for approval at its March meeting.

Attachments & Reports:

Draft Board Policy 214 – Institutional Authority on Political Matters



1. NAME OF ITEM: Approval of Revised Board Policies 404.4 and 404.5 - Terms of

Appointment and Benefits for Presidents and Chancellor and

University of Maine System Professor, Researcher, or

Administrator

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

404.4 Chancellor and Presidents Benefit Package

404.5 Appointment – System Professor, Researcher or Administrator

#### 5. BACKGROUND:

Board policy 404.4 outlines terms of appointments and benefits for presidents/chancellor. Board policy 404.5 describes the UMS Professor, Researcher or Administrator status for which presidents may be eligible. The existing policies are not fully aligned with current UMS practice or national higher education practice. It is desirable to bring the practices and policies back into alignment to avoid confusion and misunderstanding about contractual terms of appointments with executives and to align expectations with actual practice for candidates who may review Board policies. Policy 404.5 no longer meets the needs of UMS and is proposed to be eliminated.

#### Proposed changes will:

- Provide the option of an initial three-year term and clarify that reappointment is subject to satisfactorily meeting evaluation outcomes
- Clarify that life insurance equal to two times base salary is a supplement to life insurance available as a standard benefit
- Provide for a vehicle allowance rather than a vehicle
- Clarify the status of university provided housing or housing allowance
- State that other terms and benefits may be individually negotiated
- Clarify that dependent tuition waiver applies only within the University of Maine System

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- Provide the option of deferred and/or incentive compensation
- Eliminate the policy for appointment as University of Maine System Professor, Researcher or Administrator

Revised policies showing the proposed changes with underlining and strikeout are attached.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the changes to Policy 404.4 and 404.5 as presented.

Attachment & Reports:

Board Policy 404.4 Board Policy 404.5



1. NAME OF ITEM: Confirmation of Faculty & Student Representatives to the

Board of Trustees

**2. INITIATED BY**: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

205 – Faculty and Student

Representation to Board of Trustees

#### 5. BACKGROUND:

To create the environment for interaction among and between Faculty and Student Representatives, the Trustees and System administration, the Trustees have provided opportunities for participation in the meetings of the committees of the Board.

One faculty member and one undergraduate student from each of the seven universities and one graduate student from the University of Southern Maine and one graduate student from the University of Maine will be appointed by the Board as non-voting representatives to the Board of Trustees and invited to participate as non-voting members on the standing committees.

Normally, the representative is expected to complete a two year term; therefore, it is an expectation that the minimum term of service by Faculty and Student Representatives to the Board be two years. The nominations will be forwarded through the Presidents to the Chancellor for submission to the Board for Trustee approval.

The following nominations are being recommended by the President:

#### <u>Faculty Representative</u>:

Timothy Surrette, UMA – December 2017 to June 2019 (finishing Terry Colby's term) <u>Student Representative</u>:

Samuel Atwood, UMA – December 2017 to May 2019 (finishing Keith Arvanitis' term)

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the appointments of the following Faculty & Student Representative to the Board of Trustees: Timothy Surrette, UMA – December 2017 to June 2019 and Samuel Atwood, UMA – December 2017 to May 2019.



1. NAME OF ITEM: Confirmation of Appointment to the University of Maine

Board of Agriculture

**2. INITIATED BY**: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

Support Maine through Research & Economic Development

#### 5. BACKGROUND:

In 1998 the Maine Legislature formed the Board of Agriculture to advise the Chancellor and the University of Maine President on matters concerning agricultural research and extension. The legislation forming the board stipulates that members of the board serve five-year terms. They may be reappointed or replaced at the end of that five-year period.

Pursuant to the legislation, the Chancellor makes one appointment to the board. UMaine recommended and the Chancellor approved the reappointment of Representative Donald Marean as the Chancellor designee. During his legislative service, he has served four terms on the Agriculture, Conservation, and Forestry Committee. He is active in the Standard Bred equine industry in the state and is very knowledgeable about the industry. Representative Marean's five-year term will be effective February 28, 2018.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the reappointment of Representative Donald Marean to the UMaine Board of Agriculture for a five year term effective February 28, 2018.

Attachments & Report

UMaine Board of Agriculture Appointment Background Information



1. NAME OF ITEM: Approval of 2017 Maine Economic Improvement

Fund Annual Report

**2. INITIATED BY**: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

Support Maine through Research & Economic Development

#### 5. BACKGROUND:

Maine statute requires the University of Maine System to provide an annual report to the Governor and Legislature in January each year. In addition to listing the annual financial data, we also include an assessment of the achievement of the annual goals and objectives, and a summary of the research and development projects that have been funded. The annual report is included in the meeting materials for review and approval.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the 2017 Maine Economic Improvement Fund Annual Report as presented.

Attachments & Reports:

2017 Maine Economic Improvement Fund Annual Report



1. NAME OF ITEM: Naming, Cooperative Extension Diagnostic and Research

Laboratory, UM

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

Support Maine through research 803 Naming of Physical Facilities and economic development

#### 5. BACKGROUND:

The University of Maine System acting through the University of Maine requests authorization for the naming of a new facility pursuant to Board of Trustee Policy 803.

Policy 803 states, in part: "...The naming of any physical facility in the University of Maine System is reserved to the Board of Trustees. Naming of any other campus area or object is reserved to the President of that University...... Facilities may be named for any individual, living or dead, except for current employees or current members of the Board of Trustees. Other acceptable names include, but are not limited to, geographical designations, functions, or University groups.... Recommendations to the Chancellor and Trustees for names of physical facilities shall be made by the President of a University after consultation with such committees as may be established for this purpose....."

In this case, the proposed name as recommended by the President of the University of Maine Susan J. Hunter is the University of Maine Cooperative Extension Diagnostic and Research Laboratory.

This facility is comprised of the Veterinary Diagnostic Laboratory, Pest Management Office and Aquatic Animal Health Lab of Cooperative Extension. Each of these units has specific labs that will be providing essential service and applied research consistent with the land-grant mission of the flagship campus. The Aquatic Animal Health Lab is shared with the Aquaculture Research Institute of the University of Maine. The new facility is being constructed through two projects already approved by the Board, the Cooperative Extension Diagnostic & Research Laboratory, project number 5100387 and the Aquatic Animal Health Facility, project number 5100440.

This combined facility will be unique in the United States and will bring efficiencies with shared spaces and resources that will enhance and improve the diagnostic and research capabilities of the faculty and staff of Cooperative Extension. The name specifically identifies Cooperative Extension to reflect the outreach and service mission of the work of the units of this facility. In addition, the name will prevent any confusion with diagnostic services directed toward human beings. The diagnostic and research testing in this facility will be on terrestrial animals including arthropods, plants, and aquatic animals.

The new facility is expected to open in the spring of 2018.

The Finance, Facilities and Technology Committee approved this recommendation to be forwarded to the Consent Agenda for Board of Trustee approval at the January 29, 2018 Board meeting.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the recommendation of the Finance, Facilities and Technology Committee for the University of Maine to authorize the naming of the University of Maine Cooperative Extension Diagnostic and Research Laboratory.



1. NAME OF ITEM: Preliminary Space Reduction Initiative Approval, UMS

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

Enhance Fiscal Positioning 701 – Operating and Capital Budgets

712 – Debt Policy

802 – Disposition of Real Property

#### 5. BACKGROUND:

The University of Maine System seeks authorization to remove by demolition as much as 300,000 gross square feet (GSF) of vacant, under-utilized or poorer condition space and to eliminate the backlog of capital investments and operating costs associated with that space at campuses statewide.

A pending Sightlines analysis indicates the University already has sold, demolished, vacated or otherwise reduced the amount of space it uses in carrying out its mission by about 250,000 GSF. The requested funding and associated demolition initiative is intended to continue that effort and to make additional progress possible. The effort to constrain any growth of facility space and to reduce it when possible is in keeping with the Trustees' directives to the University on that specific point and also its directives and aspirations to increase the density (i.e. utilization) and the net asset value (i.e. condition) of the University's facility portfolio.

This request carries the support of the Capital Advisory Team, a standing stakeholder group that was created with the sanction of Trustees and chaired by the Treasurer to review and advise the Treasurer on capital matters. The membership is updated annually and includes representatives of facility, finance and budget personnel, chief business officers, chief academic officers, Presidents and others. The group assists with and helps guide funding requests to the legislature, the annual capital budget process and special capital related initiatives such as this.

The facilities to be removed would be proposed by campus leadership, reviewed by the capital advisory team and authorized, per existing Trustee policy, by the Treasurer. Projects costing in excess of \$500,000 would also be presented to Trustees per current policy and protocol. No campus would be compelled to participate. Rather, funding would be allocated to those choosing to propose projects that best advanced the Trustee directives above.

Additional details about what the project would aim to achieve, assessments of its potential impact and details about how the funds would be allocated and administered are attached.

The project would be funded by the sale bonds to be approved at a later time by Trustee pursuant to the usual Trustee and University practices and at the direction of the University Treasurer and Controller. The intention would be to generate approximately \$10 million in proceeds.

The matter before Trustees today is the preliminary approval to pursue the initiative. It would only truly move forward once Trustees approve the funding mechanism.

The Finance, Facilities and Technology Committee approved this recommendation to be forwarded to the Consent Agenda for Board of Trustee approval at the January 29, 2018 Board meeting.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the recommendation of the Finance, Facilities and Technology Committee to authorize the University of Maine System to pursue the removal by demolition of as much as 300,000 gross square feet of vacant, under-utilized or poorer condition space and to eliminate the backlog of capital investments and operating costs associated with that space at campuses statewide, with final approval of the funding mechanism to occur at a later meeting.



1. NAME OF ITEM: Schematic Design Center for the Arts at USM

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

#### 4. OUTCOME: BOARD POLICY:

Increase enrollment 701 – Operating & Capital Improve student success and completion
Support Maine through research and economic development
Relevant academic programming

#### 5. BACKGROUND:

The University of Maine System acting through the University of Southern Maine requests authorization to expend up to a preliminary \$1 million to perform Schematic Design and related services for a new building to be known as the Center for the Arts at the University of Southern Maine. The funds to cover these costs are to be provided by the USM Foundation

This request is pursuant to Board policy 701, which requires projects with a total cost of more than \$500,000 to be considered by the Board of Trustees or its Finance, Facilities and Technology Committee. The request is also pursuant to Trustee policy prohibiting net increases in space without Trustee authorization. In this case, the request is to approve and to forward this matter to the consent agenda of the Board of Trustees.

During the summer of 2017 with assistance from the USM Foundation a study was completed to determine the programmatic needs and a conceptual estimate of construction costs related to a new facility for the performing and visual arts to be located in Portland. The project is currently projected to cost approximately \$65 million with an estimated 69,000 gross square feet. These are very preliminary figures. This cost is expected to be funded largely by philanthropy as outlined in USM's "The Next Generation Capital Campaign" which was presented to the Board and approved in May, 2017. The current request is for approval to expend only the amount necessary to begin formal design and bid preparation work.

USM's music, theater and art programs have an outsize influence that extends far beyond the geographic region. USM graduates go on to sing at the Metropolitan Opera, perform on Broadway, record and tour around the world, teach at our nation's leading universities and in K-12 classrooms all over Maine. They exhibit in prestigious galleries, write plays and graphic novels, and compose film scores. USM Arts alumni have won the highest awards in their field, including the Grammy, Emmy and Golden Globe. A new Center for the Arts at USM will match the caliber of the students and the program – an aspiration of the University's that has been over 30 years in the making, going back to the Cambridge Study of 1984.

Performance is a major part of all academic work in the College of Arts, Humanities and Social Sciences, and in particular for the over 200 students enrolled in Music and Theater. The School of Music puts on roughly 120 public performances per year, to audiences totaling over 9,400. The Department of Theater mounts an additional 30 to 40 productions per year. The performances range in size from small student recitals with 50 student attendees, to youth ensemble concerts with upwards of 800 in attendance.

All of the performances that are put on USM's stages are tied to course work. Much of USM's faculty scholarship through their creative work is also featured on the University's stages. Not having a correctly sized performance venue impacts the academic work of every student and faculty member.

Over 20 of these performances per year are moved to off-campus sites due to the inadequacies of the current facilities.

Some of these inadequacies that will be improved with the proposed building include:

- Opera venue with no orchestra pit which creates acoustic imbalances between the soloists and the orchestra;
- Performance venues size/seating are too small for large ensembles and large audiences, resulting in rental of off-site facilities and local auditoriums that were not made for these types of performances and therefore have inadequate acoustics;
- Also as a result of the incorrect size of venues, the college must disassemble, move, and reassemble costly instruments between venues;

The concept plan includes a 1,000 seat acoustically superior concert hall; a recital hall with 250 seats; a Black Box Theater; an Art Gallery; a rehearsal room; practice/studio rooms; lobby and care and other support spaces for such a venue.

USM alumni and faculty are some of the most important musicians and teachers in the region, making it hard to make a distinction between what is an academic justification versus a community need. Having the right Center for the Arts on our campus will benefit both. It will engage the arts community, will bring them closer to our students and faculty all while being an iconic home for the arts at USM. This hall would place at USM a hall that the community needs.

In addition to community collaboration, the use of the facilities by outside entities is expected to generate revenue which would allow this new facility to be fiscally self-sustaining at a minimum and potentially revenue generating. The business plan to demonstrate this will be completed and presented to Trustees before final project approval is sought and as part of seeking Trustee authorization for the full budget needed actually to construct the project. The current request is for planning purposes only.

The exact size, design, programming, timeline, operating costs and other details of the new facility remain to be determined. Also, the specific location of the new building on the Portland campus has not been finalized. However, the Portland location will place USM at the heart of the region's thriving arts and cultural community, expose USM talent to larger audiences and enhance the University's value within the area's growing creative economy. The particular location of the building will be among the details to be determined as part of the Schematic Design process.

When the project is ready for construction, the University may pursue an alternative delivery method for this project as permitted under University practices.

As currently envisioned, this project would represent an increase is gross square footage at USM but would generate the revenue to be self-sustaining. The Sightlines net asset value of the current primary performing arts building, Russell Hall, was 45 percent in the most recent annual report provided to Trustees. That is an estimated net asset value that Sightlines would suggest is low enough to warrant substantial action, such as full restoration or replacement of the facility, not merely modest investment.

The Finance, Facilities and Technology Committee approved this recommendation to be forwarded to the Consent Agenda for Board of Trustee approval at the January 29, 2018 Board meeting.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the recommendation of the Finance, Facilities and Technology Committee to authorize the expenditure of up to \$1 million to begin the Schematic Design of the Center for the Arts at the University of Southern Maine with funding to be provided by the USM Foundation subject to the approval of the University Treasurer

#### Center for the Arts at the University of Southern Maine

USM's music, theatre and art programs have an outsize influence that extends far beyond our geographic region. Our graduates go on to sing at the Met, perform on Broadway, record and tour around the world, teach at our nation's leading universities — and in K-12 classrooms all over Maine. They exhibit in prestigious galleries, write plays and graphic novels, and compose film scores. They win Grammys, Emmys, and Golden Globes.

It's time to build a Center for the Arts that matches the caliber of our students and the excellence of our programs – a dream that has been over 30 years in the making, going back to the Cambridge Study of 1984. More recently, in 2010, a plan for the creation of a Gorham Arts Campus, including a new performing arts center, was developed by the Gund Partnership. A subsequent campaign feasibility study, conducted by Panas, Linzy & Partners, concluded that the right place for this investment in USM's music, theatre and art programs was not Gorham but Portland—a campus at the center of arts and culture in Maine.

That vision is taking shape with conceptual plans for a multipurpose facility on USM's Portland campus that will meet the needs of USM's performing and visual arts programs, while filling a venue gap in the wider arts community. The concept design and cost estimate were developed by Scott Simons Architects and Wright Ryan Construction. (See attachment A)

#### **Concept Plan**

The concept design for the new Center for the Arts accommodates USM and community music ensembles of all sizes, including symphony, opera, choral, youth ensembles and musical theatre. It will also provide needed space for theatrical productions, art exhibits, and community gatherings.

The Portland location will place USM at the heart of the region's thriving arts and cultural community, expose USM talent to larger audiences, and enhance the University's value within the area's growing creative economy. The new facility will open up opportunities for partnership with area arts organizations and international presenters, and facilitate greater collaboration with Maine schools – an important recruitment consideration.

Programming components of the new Center for the Arts include:

- A 1,000-seat, acoustically superior concert hall
- Recital hall with 250 seats
- Black box theater
- Art gallery
- USM Club gathering room and public spaces
- Rehearsal room and storage for sets, costumes, props, and instruments
- Practice/studio room, dressing rooms, green room and production offices
- Lobby area and cafe

The facility will be sustainably designed and engineered to meet high standards of energy efficiency. It will feature cross-laminated timber (CLT) framing, an advanced building material that is environmentally sustainable. We are exploring every opportunity to reduce the Center's carbon footprint.

The campaign for the Center for the Arts at USM will raise funds to support construction of the new facility as well as expansion of the parking garage and operational reserves.



**ATTACHMENT A – Center for the Arts Cost Estimate** 

# Setting the Stage for Greatness

The new Center for the Arts will catapult USM into a new era of visibility and impact in our region. This iconic architectural landmark will transform our metropolitan campus, dramatically enhance the USM student experience, elevate our stature within the thriving creative economy of Portland, and set the stage for greatness at the University of Southern Maine.

The USM Foundation is bringing together supporters, visionaries, and leaders in our community to champion the Center for the Arts. The concept design and cost estimate package represents the collaborative input of University faculty and staff, as well as Portland area arts organizations and community leaders.

The funding goal for building a state-of-the-art center for creativity, collaboration, and community engagement is \$54 million, plus endowed operational reserves.

#### **Estimated Project Costs:**

**Building Construction** 

\$38.5 million

Other Project Costs

\$9.6 million

Parking Garage Extension

\$5.9 million

**Total Building Costs** 

\$54 million

Operational Reserves

\$5.5-15 million

**Total Campaign Goal:** 

\$59.5-69 million



SETTING THE STAGE FOR GREATNESS Center for the Arts at USM



1. NAME OF ITEM: Defined Contribution Plan – Vendor Fee Update

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

Primary Outcome: Section 709 - Investments

Enhance fiscal positioning

#### 5. BACKGROUND:

CAPTRUST periodically benchmarks the administrative fees that TIAA, as the plan's service provider, charges to UMS plan participants. Based on the most recent benchmark and negotiations, TIAA has agreed to lower the administrative expense charged against the plan effective January 1, 2018. The new proposal offers to lower fees by 1.5 basis points (bp), from 8 bp (.08%) of plan assets to 6.5 bp (.065%), resulting in savings to plan participants of approximately \$210,000/year.

At the December 5, 2017 Investment Committee meeting, members supported the revised pricing. Lacking a quorum, this item is being forwarded to the Board of Trustees for approval at the January 29, 2018 meeting.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the revised lower TIAA administrative expense pricing of 6.5 basis points of plan assets effective January 1, 2018.



1. NAME OF ITEM: Mid Cap Growth Manager Review – Defined Contribution Plans

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

Primary Outcome: Section 709 - Investments

Enhance fiscal positioning

#### 5. BACKGROUND:

At the September 2017 meeting, Michael Pratico with CAPTRUST, provided an overview of plan investments, including the scoring of investments, consistent with the Investment Policy Statement. All funds, with the exception of the Goldman Sachs Growth Opportunities fund, were in good standing. CATPRUST provided an update on the fund's performance at the December 5, 2017 Investment Committee meeting and provided the enclosed Mid Cap Growth Investment Comparison search book. The book compares this fund with two other Mid-Cap Growth managers.

Goldman Sachs Growth Opportunities Fund Performance: Following a disappointing performance in calendar 2015, the strategy again lagged its peers and the benchmark in calendar 2016. The strategy outperformed in the first half of 2016, but lagged significantly in the second half due to a rally in lower quality stocks. CAPTRUST noted that near term performance has been strong. Calendar year to date, through early December, the fund is up 25+% in absolute terms and in the top quartile peer relative. For the trailing one-year period, through early December, the fund is in the top third peer relative and up 27+% in absolute terms.

Based on recent fund performance, CAPTRUST recommended retaining Goldman Sachs and close scrutiny in the coming months which was supported by the Committee members present. Lacking a quorum, this item is being forwarded to the Board of Trustees for approval at the January 29, 2018 meeting.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the retention of the Goldman Sachs Growth Opportunities fund in the Defined Contribution Plan.

Attachments & Reports
DC Plan - Mid Cap Growth Manager Comparison



1. NAME OF ITEM: FY2019 Endowment Spending Rate

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

Primary Outcome: Section 709 - Investments

Enhance fiscal positioning

#### 5. BACKGROUND:

Last March, when the Investment Committee approved the FY2018 endowment distribution rate per share, the Committee asked that the spending rate discussion occur earlier in the budget cycle so that changes could easily be made if warranted. Therefore, Ms. Tracy Elliott, Vice President of Finance and Controller, brought the proposed Fiscal Year 2019 (FY2019) endowment spending rate to the Committee for review and approval at its December 5, 2017 meeting.

#### **Background**

The endowment spending rate has been 4.5% since FY13, being adjusted down from 4.75% in FY12 and 5% in FY11. These adjustments were made to ensure the sustainability of the long-term spending ability of the endowment funds.

The current FY18 **spending rate** of **4.5%** (which includes an internal management fee, where charged) is currently estimated to generate a distribution of \$5.5 million for the year, including \$4.4 million for endowed spending and \$1.1 million for internal management fees. The FY18 **effective spending rate** for UMS is **3.5%**.

Effective Spending Rate Defined: The effective spending rate equals the amounts distributed for spending divided by the beginning market value (endowment value on or around the beginning of the fiscal year), net of any fees or expenses for managing and administering the endowment. Distributions for spending are the amounts withdrawn from the endowment to support the institution's mission.

*NACUBO Commonfund Study of Endowments*: Annually, the National Association of College and University Business Officers (NACUBO) and Commonfund Institute report on endowment performance and management practices in higher education. Their most recent 2016 report (see enclosed pages 55 and 56 from that report), shows the average effective spending rate for their 805 participants to be 4.3%. For the category based on

assets of \$101-500 million, the effective spending rate is also **4.3%** up from 4.1% in the prior year. For 2016, the UMS effective spending rate was in line at **4.2%**.

**NEPC Rate of Return Assumption:** NEPC updated the return expectations for the UMS Managed Investment Pool in July 2017. Their analysis suggests that a return expectation in the range of 6.5% to 7.5% is reasonable. The enclosed letter provides their rationale. NEPC's return expectations will likely change following an update to their asset allocation projections in January 2018 and the adoption of related recommendations by the Committee at its March 8, 2018 meeting; however, Mr. Jay Roney with NEPC noted that their 30-year return assumption might not go down.

**FY19 Endowment Distribution Rate Per Share and Estimated Budget:** Using the approved endowment spending rate for FY19, management will present an information item to the Committee at its March meeting detailing the distribution rate per share and the resulting estimated amounts.

**Distribution Rate Calculation:** The distribution formula uses a 3-year rolling endowment pool market value average to which a percentage spending rate is applied. The resulting distribution amount is then divided by the total number of shares in the endowment pool to arrive at the distribution rate per share. The UMS Accounting Department uses the approved rate per share in the monthly allocation process whereby each endowment receives a distribution based on the respective number of shares held. UMS does not distribute funds for underwater endowments during the following fiscal year.

**Recommendation:** The UMS Chief Business Officers support an endowment spending rate of 4.5% and management recommends this rate be continued for FY19.

Following discussion, the Committee members expressed support for the proposed 4.5% spending rate. Lacking a quorum, this item is being forwarded to the Board of Trustees for approval at the January 29, 2018 meeting.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves an endowment spending rate of 4.5% for FY19.

**Attachments & Reports** 

FY19 Endowment Spending Rate - NACUBO Commonfund Study FY19 Endowment Spending Rate - MIP Assumption



**1. NAME OF ITEM:** Honorary Degree Nominations for 2019

**2. INITIATED BY**: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

213 – Honorary Degrees

5. BACKGROUND:

Honorary Degree nominations from the University of Maine System campuses are presented annually for approval. In accordance with Board practice, the nominations are presented a year in advance and will be reviewed in Executive Session. Action will be taken in the public meeting without identification of the individual honorees. Publicity is the responsibility of the campus after arrangements for conferral of the degree are complete.

#### 6. TEXT OF PROPOSED RESOLUTION

That the Board of Trustees approves the 2019 nominations for Honorary Degrees as presented.



1. NAME OF ITEM: Tenure: UMM Head of Campus

**2. INITIATED BY**: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

Section 310

#### 5. BACKGROUND:

Dr. Andrew Egan has been identified as a new hire to fill the role of Head of Campus and Vice President of Academic Affairs at the University of Maine at Machias (UMM). Dr. Eagan has more than 20 years in academic leadership positions, including service as the Chancellor and Chief Academic Officer of the Great Allegheny Campus of Penn State University. Other administrative experience for Dr. Eagan includes roles as coordinator, dean, associate vice president, and director of research. In these roles, he has demonstrated an impressive breadth of accomplishment ranging across many aspects of university function and community service, including program development, Senior Fulbright Scholar, Peace Corps service, among many other achievements.

President Susan J. Hunter has requested tenure at the rank of Professor of Environmental Studies at UMM for Dr. Egan, with tenure to be effective if/when the administrative position ends. Tenure has also been supported on the UMM campus by William Otto, Chair of Environmental and Biological Sciences. Dr. Eagan has previously held tenure within the University of Maine System, as well as at the Universite' Laval in Canada. His published scholarship has primarily been in the discipline of forestry and forest products, with more than 100 scientific and technical papers. In 1997, he was recognized for his scholarly achievement with a Faculty Research Award from the College of Agriculture and Forestry at West Virginia University.

That the Academic and Student Affairs Committee approved this recommendation to be forwarded for Board of Trustee approval at the January 29, 2018 Board meeting.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the recommendation of the Academic and Student Affairs Committee for the appointment of tenure at the rank of Professor of Environmental Studies to the candidate for the position of Head of Campus and Vice President of Academic Affairs at UMM, with tenure to be effective if/when the administrative position ends and the individual assumes a full-time faculty position in Environmental and Biological Sciences at UMM, in accordance with Board Policy.



1. NAME OF ITEM: Approval of Collective Bargaining Agreement, AFUM

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

Enhance fiscal positioning Section 407 Labor Relations University workforce engagement

#### 5. BACKGROUND:

The Board of Trustees delegates responsibility for negotiating collective bargaining agreements to the Chancellor. The Chancellor reports tentative agreements to the Board for approval prior to executing the agreements.

The University has reached a tentative agreement with the Associated Faculties of the Universities of Maine (AFUM, MEA/NEA) representing the full-time faculty. The Board will be briefed on the terms of the Agreement at the meeting.

#### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees authorizes the Chancellor to execute the collective bargaining agreement with the Associated Faculties of the Universities of Maine (MEA/NEA) upon notice that the agreement has been ratified by the union.



### AGENDA ITEM SUMMARY

1. NAME OF ITEM: FY18 & FY19 Compensation and Benefit Changes for Non-

Represented Employees

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

University Workforce Engagement Section 407 Labor Relations

### 5. BACKGROUND:

Non-represented employees in the following categories are in positions which are not covered by collective bargaining agreements. Compensation and employment policies for these employees are recommended by the Chancellor and approved by the Board of Trustees. The Board of Trustees approved compensation increases for Non-represented Salaried and Hourly staff at its July 2017 meeting. The following groups have not yet received compensation increases.

- a. Management Group, positions at or above the level of dean;
- b. Non-Represented Faculty, excluding Law Faculty, full-time and part-time non-represented faculty;
- c. Presidents

The Chancellor recommends wage, salary and benefit adjustments for non-represented employees in these categories for FY18 and FY19 as follows:

### **Salaries**

The following describes pay increases available to eligible employees in each category. These employees may also be eligible for individual pay increases under existing policies such as promotion, reclassification, the addition of significant increased responsibilities, retention, and correction of inequities.

To be eligible for an increase described below an employee must be actively employed and receiving pay in the pay period in which the increase is processed. To be eligible for

the FY18 increase, employees must have been employed in a regular status as of June 30, 2017. To be eligible for the FY19 increase, employees must have been employed in a regular status as of June 30, 2018.

### Non-Represented Faculty Excluding Law Faculty

- For full-time non-represented faculty, salary increases, health plan premiums and any other benefit changes will be equivalent to what the faculty members would receive if they were included in the full-time faculty bargaining unit.
- For non-represented part-time faculty, salary increases and any other benefit changes will be equivalent to what the faculty members would receive if they were included in the part-time faculty bargaining unit, unless otherwise indicated below.

### **Management Group and Presidents**

- FY18 each president and the Chancellor will have an amount equal to 2% of the salary base for that group of employees, to be distributed by the president and Chancellor on the basis of performance, to correct inequities and for retention. All increases awarded from this pool will be effective July 1, 2017.
- FY19 each president and the Chancellor will have an amount equal to 2% of the salary base for that group of employees, to be distributed by the president and Chancellor on the basis of performance, to correct inequities and for retention. All increases awarded from this pool will be effective July 1, 2018.

### Health Insurance Plan and Wellness Incentive

Non-Represented Hourly, Non-Represented Salaried, Non-Represented Faculty, Law Faculty, Non-Represented Part-time Faculty, Management Group, Presidents and Chancellor:

Health plan provisions and premium share and wellness program incentives will be modified if necessary to manage the increase in the group health plan for calendar year 2018. Plan modifications will be reviewed by the Employee Health Plan Task Force and to the extent possible will be consistent with the pathways established by the Task Force.

### 5. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees approves the recommendation for the Non-Represented Compensation and Benefit changes for FY18 and FY19 as presented.

01/18/2018



## **AGENDA ITEM SUMMARY**

1. NAME OF ITEM: UM & USM Capital Campaign Updates

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: X BOARD ACTION:

4. OUTCOME: BOARD POLICY:

All Primary Outcomes

5. BACKGROUND:

University of Maine President Susan Hunter and University of Southern Maine President Glenn Cummings will provide an update on their capital campaigns.

2N 1

To: Glenn Cummings From: George Campbell Date: January 23, 2018

Re: Progress Report on USM Next Generation Campaign

### **Philanthropic Projects**

#### Promise Scholarship

- Working closely with our campaign co-chairs, Carolyn and Richard McGoldrick, we have secured gifts and pledges of \$6 million towards the goal of \$15 million, including a generous seed gift from the McGoldricks. The Promise Scholarship campaign continues in the quiet phase.
- We are working to secure grant funding to establish an enhanced advisory support system to ensure the success of Promise Scholars. Funds to sustain dedicated advisory personnel will be raised through the Promise campaign.
- We are continuing to build partnerships with a growing list of very engaged community development organizations throughout southern and central Maine. A complete list of Promise partner organizations is attached.

### Gorham Athletics

- We are in the initial stages of a capital campaign to support the USM Athletics program.
   Priority projects on the Gorham campus have been identified in three areas: 1) Lighting all three playing fields and leveling the baseball field; 2) Completing the Hannaford Field/Grandstand project; and 3) Renovating and expanding the Costello Sports Complex. Estimated campaign total: \$15 million; \$5 million secured to date.
- Our Athletic Development Council will serve as leadership council for the Gorham Athletics Campaign.

### Center for the Arts

- With BOT approval to go forward, design and construction of the Center for the Arts now follows the University's Facilities Master Planning process.
- The Master Planning Steering Committee is responsible for siting of the new facility, in conjunction with the master plan for the USM Portland campus.
- Selection of the Architect-Engineering team, as well as construction management services is the responsibility of the Building Committee, supported by UMS Capital Planning and Project Management.

- The \$60 million Center for the Arts fundraising campaign is co-chaired by Kate Cheney Chappell '83, Bonnie Porta '80, and Larry Rubinstein. Recruitment of the Leadership Committee and lead gift solicitation is under way.
- Attached is an overview of Center for the Arts project priorities, process and committee members of the USM Master Planning Steering Committee, Building Committee, and Campaign leadership.

### Risk Management Endowment

 In July, MEMIC granted the University of Southern Maine \$1.5 million to create the John Leonard Chair of Risk Management (only our second endowed chair since the University's inception in 1878). Working closely with MEMIC, we have gifts/commitments to date of \$1.81 million, 60.3% of our \$3 million goal.

### > Career Development and Student Success Center

- A Student Success Center anchored by a Career and Employment Hub is part of the proposed Workforce Development bond package for the entire UMaine System, to be considered in the special legislative session.
- A key element of the USM Master Plan for the Portland campus, the Career
  Development and Student Success Center will connect students with opportunities for
  internships, externships, and co-op placements, as well as provide job placement, career
  advising, and other services.
- The GO bond includes funding that would be used for other key USM priorities: Facility upgrades and program expansion in Engineering, Nursing, and Computer Science/Cyber security & Technology.

### Other Alternative Financing Projects

 USM is preparing to undertake a residential housing market study for the Gorham and Portland campuses. This study will determine the number and types of residences (dormitories) that are feasible.

Att: Promise Scholar Partner Organizations; Center for the Arts priorities, process and committees

# Setting the Stage for Greatness at USM Center for the Arts

### **Project Priorities**

The new Center for the Arts at the University of Southern Maine will be designed and engineered to meet four project priorities:

- 1. To build an iconic, signature building on USM's Portland campus
- 2. To create a showcase for USM talent, and bring in the wider arts and cultural community
- 3. To achieve sustainability in both energy efficiency and revenue generation
- 4. To meet the programming needs of Music, Theatre and Fine Arts, both for USM and the community

#### **Process**

Design and construction of the new facility will follow the University's Facilities Master Planning process. Funding of the CFA will be led by the USM Foundation.

- Master Planning Steering Committee -- Responsible for the siting of the new Center for the Arts, in
  conjunction with the master plan for the USM Portland campus. Comprising faculty, staff, students
  and community representatives, the Committee is co-chaired by Provost Jeannine Diddle Uzzi and
  Cyrus Hagge.
  - Authorization from the University of Maine System Board of Trustees is expected on 1/29/18
- Building Committee Responsible for the selection of the Architect-Engineer team, as well as
  construction management services, taking the project from the design and permitting phase
  through building construction and completion. The Committee is formed by the president and will
  work with stakeholder groups from the Portland campus. A subcommittee of the Building
  Committee will be responsible for the designer selection process.
  - The Committee, once authorized by the University of Maine System Trustees, begins its work in February 2018. Construction is slated to begin in January 2020, with completion in fall 2022.
- Fundraising Leadership The USM Foundation is responsible for the Center for the Arts \$60 million fundraising campaign, co-chaired by Kate Cheney Chappell '83, Bonnie Porta '80, and Larry Rubinstein.
  - Recruitment of the Leadership Committee begins in first quarter of 2018
  - o The quiet phase of fundraising is ongoing; public phase begins in summer 2019

# 20.2

### **USM Master Planning Steering Committee**

Jeannine Diddle Uzzi, Co-Chair Provost and V.P. Academic Affairs, USM

Cyrus Hagge '83, '84, Co-Chair USMF Board Chair, President, Project Management, Inc.

George Campbell, Jr.

Nancy Griffin

V.P. Enrollment Management, USM

Buster Neel

Interim Chief Business Officer, USM

Alan Kashuh (Faculty Rep)

Director, USM School of Music

Alan Kashub (Faculty Rep)

Jerry LaSala (Faculty Rep)

Muna Adan (Student Rep)

Director, USM School of Music
Professor Physics, USM
Student Senate Chair

Cathy Clements (Staff Rep)

Data Management Technician, Office of Admissions
Ashley Collins (Staff Rep)

Director, Office for Prior Learning Assessment, USM

Joyce Gibson (LAC Campus Rep)

Dean, Lewiston-Auburn College

Aaron Witham Assistant Director for Sustainable Programs, USM Ed Suslovic (Portland community member) Former City Councilor and Maine House member

David Cole (Gorham community member)

Joan Cohen (Ex Officio Member)

Former Gorham Town Manager

Special Assistant to the President, USM

Bob Stein (Ex Officio Member) Executive Director of Public Affairs and Marketing, USM

# Building Committee Member Nominations USM (Voting Members):

Adam Tuchinsky Dean, College of Arts, Humanities and Social Sciences

Joan Cohen Special Assistant to the President

Alan Kaschub Director, School of Music Andrew Harris Chair, Theater Department

Carolyn Eyler Director of Exhibitions, Art Department

Carolyn McDonough Director of Capital Planning & Project Management

Adam Thibodeau Assistant Director of Capital Planning & Project Management

Adam Thibodeau Assistant Director of Capital Planning & Project Management

John Souther Executive Director, Facilities Management

Aaron Witham Assistant Director for Sustainable Programs

TBD Project Manager, Capital Planning & Project Management

### **External (Non-voting Members):**

Eileen Oberholtzer USM Foundation, Development Officer
Larry Rubinstein Center for the Arts Capital Campaign Chair

Cyrus Hagge '83, '85 USM Foundation Board Chair, Master Planning Steering Committee Co-Chair

Mary Nelson '88 USM School of Music Advisory Board Co-Chair
Peter Plumb USM School of Music Advisory Board Co-Chair

Don Head College of Arts, Humanities and Social Sciences Advisory Board Chair

## CFA Philanthropic Leadership Team

### Co-Chairs:

Kate Cheney Chappell '83 Bonnie Porta '80 Larry Rubinstein

Rev. 1-11-18





# Promise Scholarship Youth Organization Partners

Alfond Youth Center
Big Brothers Big Sisters of Southern Maine
Boys & Girls Clubs of Southern Maine
Boys & Girls Clubs of Greater Waterville
Cultivating Community
Cutler Institute of Health & Social Policy
Good Will-Hinckley

Jobs for Maine's Graduates

Island Institute

Kennebec Valley Boys & Girls Clubs

**Learning Works** 

Long Creek Youth Development Center

The Maine Children's Home for Little Wanderers

My Place Teen Center

Olympia Snow Women's Leadership Institute

Portland Adult Education

**Portland Community Squash** 

**SMART Child and Family Services** 

Susan Curtis Foundation

The Summer Camp

Tree Street Youth

The Telling Room

**TRIO Upward Bound** 

**Wayfinder Schools** 

YMCA of Auburn-Lewiston

YMCA of Southern Maine

YMCA of Central Maine

## **20.4**

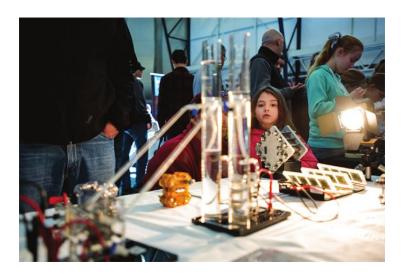
# University of Maine Vision for Tomorrow Comprehensive Campaign Update January 29, 2018

- Our Vision for Tomorrow comprehensive campaign was launched for the public on Friday, November 13, 2017
- ➤ We have raised \$134 million toward our \$200 million goal. This is \$13 million ahead of the total we announced to you in November. Other major gifts are in the pipeline with individuals, classes, foundations, and companies.
  - This extraordinary success in the most recent quarter is due to a number of factors.
    - Donors frequently choose to give at the end of the year.
    - Donors wanted to give before major tax changes.
    - Donors perceive the economy as strong and appear to have confidence in current market conditions.
- ➤ As we reported in November, the University of Maine Foundation received a \$1 million matching gift from an anonymous donor. This match has been very popular, particularly for undergraduate scholarships which are always so important to our students and our state as a whole.
  - As of January 21, 139 donors have made gift commitments totaling over \$3 million in response to this match.
  - We have committed nearly \$825,000 of the initial \$1 million match from the anonymous door
  - While the majority of the gifts and pledges have enhanced existing funds, we are pleased that the match has inspired the creation of at least 30 new funds.
- > We have four campaign themes:
  - Fostering Student Success
  - Ensuring Access for all of Maine
  - o Catalyzing Maine's Economy
  - Accelerating Discovery to Impact

Each of these themes has inspired gifts from our alumni and friends. One campaign project that touches all of these areas is our new Engineering Education and Design Center. This is a top priority for us, and I'm pleased that we've had early success with our Engineering Advisory Board members, alumni, and others, with \$800,000 raised to date and some substantial proposals pending. The team of WBRC Architects Engineers, based in Bangor, and Ellenzweig, an architecture and planning firm in Boston, has been selected to design the state-of-the-art facility. Additional information on the EEDC project is included with this board update.

- We are pleased to have a Web site for the campaign and materials for the Vision for Tomorrow Matching Gift Program. Other marketing tools for the campaign are underway.
- ➤ Because Vision for Tomorrow is a comprehensive campaign, every gift counts. Our Annual Fund, an important source of support for the entire university, is ahead of last year.
- ➤ I am traveling with Jeff Mills and others to promote the campaign. In addition to meeting with individual donors we have a number of events for alumni and friends planned in other parts of the country including Arizona, Florida, Boston, and the Washington, D.C. area.

### **BUILDING ON SUCCESS**



Future engineers are counting on us.





University of Maine College of Engineering 5796 AMC Building

Orono, ME 04469-5796

engineering.umaine.edu

Front cover conceptual drawing by Sasaki Associates.

For more information about making a gift:



University of Maine Foundation
Buchanan Alumni House
Two Alumni Place
Orono, ME 04469-5796
umainefoundation.org
umainefoundation@maine.edu
207.581.5100 or 866.578.2156

The University of Maine is an equal opportunity/affirmative action institution.



### **Engineering Education and Design Center**









# **BUILDING ON SUCCESS**







### PREPARING FOR FURTHER GROWTH

IN 1872, ENGINEER BENJAMIN GOULD was the first graduate of the University of Maine. Since then, Maine engineers continue to hold important and influential positions in Maine's economy and beyond.

The University of Maine College of Engineering has seen remarkable growth — 70% growth in undergraduates since 2001. As a result, our faculty and facilities have reached capacity. Starting in Fall, 2016, the College had no choice but to cap enrollment in our most popular programs.

The next step for the College is to build infrastructure to serve the demand from incoming students and need from industry for our graduates. With a job placement rate approaching 99%, economic and labor statistics in Maine support this growth.



We are working hard to build a new building to provide additional classrooms, laboratories, new technology and graduate school opportunities. The laboratories and classrooms will focus on team-based, hands-on engineering which industry demands of our graduates. The addition of new space will support modern interdisciplinary approaches to engineering projects. The new Engineering Education and Design Center will be located in the heart of the current engineering district on campus, enabling maximum utilization.

This building represents Phase II of the College's facilities plan. Phase I was completed in 2016, addressed critical safety and maintenance issues for current buildings.

"This is a responsible, no risk investment for UMaine. The demand is high from both prospective students and industry. The College has a history of success and this project builds on that success."

Dana N. Humphrey, Ph.D., P.E. Dean College of Engineering Saunders Professor of Engineering Leadership and Management

Universities across the country are in a similar situation. In New England alone our peer institutions (public flagship universities) are currently investing nearly \$1/2 billion in similar upgrades to their engineering capacity. UMaine and Maine are positioned to continue to be leaders in engineering. Phase II of our facilities plan will secure that position.



"We are not putting out as many engineers as we need. The opportunity begs for more, the economy wants more."

Dana Connors '64, '15H President Maine State Chamber of Commerce

#### **MAINE STATISTICS**

- Maine's capacity to produce new engineers is drastically outpaced by the demand for engineers. Maine needs to nearly double production of engineering graduates to keep up with demand
- Maine has growth potential for engineers who have earned advanced degrees. Maine currently ranks 51st in the country in per capita production of engineering master's degrees
- Maine's aging population includes a large cohort of retiring engineers who will need to be replaced soon — 27% of Maine's engineering workforce is age 55 or older
- Each engineer adds \$600,000 to Maine's GDP annually

# RECENT UMAINE ENGINEERING SUCCESSES

- $\bullet$  Bridge-In-A-Backpack  $^{\text{TM}}$  spinoff company signs agreement with international firm
- UMaine opens Alfond W<sup>2</sup> Ocean Engineering Lab
- Maine Technology Institute funds development of hightemperature sensor
- UMaine wireless leak detection system deployed on International Space Station
- Cellulose nanofibrils production technology is now globally deployed with one domestic and two international sites

# INVESTING IN OUR ECONOMIC FUTURE



The College of Engineering is a UMaine Signature Area of Excellence

99%

placement rate for UMaine engineering graduates

25%

growth in engineering employment in Maine since 2006

**87**%

engineering degrees granted in Maine are from UMaine

1,450

job postings for engineers in Maine 6/1/15 through 5/31/16

\$86,114

average salary of an engineer working in Maine

1,750

projected number of replacement engineers needed in Maine in the next decade



### AGENDA ITEM SUMMARY

1. NAME OF ITEM: Approval of Collective Bargaining Agreement: Fraternal Order of

Police, Lodge #100

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: BOARD ACTION: X

4. OUTCOME: BOARD POLICY:

Enhance fiscal positioning Section 407 Labor Relations University workforce engagement

### 5. BACKGROUND:

The Board of Trustees delegates responsibility for negotiating collective bargaining agreements to the Chancellor. The Chancellor reports tentative agreements to the Board for approval prior to executing the agreements.

The University has reached a tentative agreement with the Fraternal Order of Police, Lodge #100. The Board will be briefed on the terms of the Agreement at the meeting.

### 6. TEXT OF PROPOSED RESOLUTION:

That the Board of Trustees authorizes the Chancellor to execute the collective bargaining agreement with the Fraternal Order of Police, Lodge #100 upon notice that the agreement has been ratified by the union.

# University of Maine System Managed Investment Pool

# Total Plan Performance Detail (Net of Fees)

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
MIP Composite	312,710,499	100.0	100.0	1.0	5.4	13.8	15.2	8.8	5.0	7.1	6.9	4.7
Allocation Index				1.3	6.5	14.8	16.5	9.6	5.9	7.5	7.0	4.6
Policy Index				1.2	6.6	15.4	17.2	10.5	6.4	7.8	7.3	5.2
Total Domestic Large Cap	60,003,746	19.2	16.0	3.0	10.2	20.4	22.8	15.1	10.8	15.3	14.2	8.8
S&P 500				3.1	10.2	20.5	22.9	15.2	10.9	15.7	14.6	8.3
SSgA S&P 500	60,003,746	19.2	16.0	3.0	10.2	20.4	22.8	15.1	10.8	15.7	14.6	8.3
S&P 500				3.1	10.2	20.5	22.9	15.2	10.9	15.7	14.6	8.3
Total Domestic Small/Mid Cap	19,326,842	6.2	6.0	3.9	11.1	19.0	21.3	14.7	10.2	15.1	13.7	10.0
Russell 2500				3.3	9.9	16.4	18.7	14.6	10.4	14.8	13.4	9.1
Westfield Capital	10,647,275	3.4	3.0	4.5	12.5	28.7	29.1	14.2	9.6	14.5	13.9	9.9
Russell 2500 Growth				3.3	12.2	24.1	25.2	14.6	11.2	15.8	14.1	9.6
DFA	8,679,567	2.8	3.0	3.1	9.3	8.9	12.0	13.9	9.7	14.7	12.9	
Russell 2000 Value				2.9	8.3	8.9	13.4	16.6	10.9	14.2	12.3	8.2
Total International Equity (including emerging markets)	71,015,336	22.7	23.0	0.9	7.1	24.3	26.7	11.0	5.4	6.2	6.3	1.9
MSCI EAFE				1.0	8.1	23.1	27.3	10.7	6.0	8.2	7.0	1.5
Morgan Stanley	19,155,042	6.1	8.0	1.7	6.3	24.0	28.4	9.1	5.3	7.1	7.4	2.6
Globeflex	19,246,459	6.2	8.0	-0.5	9.4	26.9	29.5	11.8	8.2	9.2	8.1	1.2
MSCI EAFE				1.0	8.1	23.1	27.3	10.7	6.0	8.2	7.0	1.5
Kabouter International Opportunities Offshore Fund II	11,339,933	3.6		3.1								
MSCI EAFE Small Cap				1.6	11.0	29.6	33.3	15.5	13.0	13.2	10.5	5.1
Emerging Markets Equity	21,273,901	6.8	7.0	0.9	4.5	20.6	20.6	11.7	1.8	1.5	2.8	-
MSCI Emerging Markets				0.2	11.9	32.5	32.8	20.0	6.1	4.6	3.1	1.4
Aberdeen Emerging Mrkts	10,431,484	3.3	3.5	-1.1	4.5	24.4	25.6	16.5	4.1	2.8	3.7	
MSCI Emerging Markets				0.2	11.9	32.5	32.8	20.0	6.1	4.6	3.1	1.4
Mondrian EM Small Cap	10,842,417	3.5	3.5	3.0	4.2	16.2	15.1	6.9	-0.6			
MSCI Emerging Markets Small Cap				1.8	11.3	29.1	28.9	14.9	6.1	5.6	2.4	2.5
Total Fixed Income	55,565,451	17.8	18.0	0.0	1.3	4.4	4.9	4.4	2.3	3.3	4.6	4.6
BBgBarc US Aggregate TR				-0.1	0.8	3.1	3.2	2.7	2.1	2.0	3.0	4.0
Commonfund	15,471,399	4.9	5.0	-0.1	1.0	4.4	4.7	3.7	2.4	2.8	4.1	4.4
BBgBarc US Aggregate TR				-0.1	0.8	3.1	3.2	2.7	2.1	2.0	3.0	4.0
Vanguard Inflation-Protected Securities	24,569,846	7.9	8.0	0.0	1.1	2.0	2.0					
BBgBarc US TIPS TR				0.1	1.2	2.1	2.0	3.0	1.4	-0.2	2.6	3.4
Guggenheim US Bank Loans	15,524,207	5.0	5.0	0.2	1.7							
Credit Suisse Leveraged Loans				0.1	1.8	3.8	5.0	6.3	4.0	4.4	4.8	4.6



November 30, 2017

### University of Maine System Managed Investment Pool

# Total Plan Performance Detail (Net of Fees)

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Total GAA	73,195,136	23.4	23.0	0.0	3.4	10.8	12.0	6.8	2.8	4.2	4.1	
65% MSCI ACWI (Net) / 35% BBgBarc Global Agg				1.6	7.0	16.6	18.0	10.6	5.9	7.3	7.1	4.2
GMO Global Absolute Return	24,135,793	7.7	7.7	-0.3	3.7	11.9	13.0	7.1	3.1	4.9	5.5	4.6
Blended Index				0.1	1.9	5.1	5.7	5.1	3.4	3.3	4.5	4.9
Wellington	24,732,095	7.9	7.7	0.1	5.7	16.4	17.6	10.0	6.6	6.9	4.8	
65% MSCI ACWI (Net) / 35% BBgBarc Global Agg				1.6	7.0	16.6	18.0	10.6	5.9	7.3	7.1	4.2
Newton Global Real Return	24,327,247	7.8	7.7	0.3	0.7	4.4	5.5					
60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg				1.6	6.6	15.8	17.1	10.2	5.6	6.8	6.7	4.1
Total Hedge Funds	26,615,423	8.5	9.0	-0.5	2.8	4.4	5.1	3.4	1.2	2.6	1.8	1.4
HFRI Fund of Funds Composite Index				0.0	3.6	6.9	7.8	3.4	2.5	4.1	2.9	1.0
EntrustPermal	8,570,971	2.7	3.0	-0.5	0.8	1.6	2.9	2.1	0.4	3.3	3.1	
HFRI Fund of Funds Composite Index				0.0	3.6	6.9	7.8	3.4	2.5	4.1	2.9	1.0
Lighthouse	18,044,452	5.8	6.0	-0.5	3.8	6.2	6.5	4.0				
Credit Suisse Long Shrt Eqt USD				0.4	5.5	12.5	13.4	4.2	4.1	7.3	5.4	4.0
Total Real Assets	5,020,486	1.6	3.0	0.0	-2.0	-2.3	-7.1	0.7	1.7	6.5	3.7	
NCREIF Timberland Index				0.0	0.6	2.1	3.3	3.3	5.3	7.2	5.4	5.2
John Hancock Timber Fund	5,020,486	1.6	3.0	0.0	-2.0	-2.3	-7.1	0.7	1.7	6.5	3.9	8.0
NCREIF Timberland Index				0.0	0.6	2.1	3.3	3.3	5.3	7.2	5.4	5.2
Private Equity	1,870,177	0.6	2.0	0.0	4.1	7.7	17.3	8.6	6.4	-		
Landmark Equity Partners XV	1,870,177	0.6	2.0	0.0	4.1	7.7	17.3	8.6	6.4			
Cambridge Associates US All PE (1 Qtr Lag)				0.0	3.6	12.4	16.8	9.9	9.5	13.4	14.0	9.3
Total Cash	97,902	0.0	0.0									
Distribution Account	97,902	0.0	0.0	0.1	0.3	0.5	0.5	0.2	0.2	0.1	0.1	0.5
91 Day T-Bills				0.1	0.4	0.8	0.9	0.6	0.4	0.2	0.2	0.3

Notes:

Fiscal YTD begins 7/1

 $Blended\ Index: 40\%\ BC\ Aggregate, 30\%\ BC\ U.S.\ TIPS\ 1-10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ S\&P\ 500, 10\%\ BC\ High\ Yield, 10\%\ JPM\ EMBI+10YR, 10\%\ BC\ High\ Yield, 10\%\ High\ Yi$ 

Returns are net of manager fees

John Hancock Timber market value as of 09/30/17

Landmark market value estimated as of 11/30/17

Cash account includes \$942 currently being held in the MetWest account and \$1,102 being held in the TCW account.

## Information Disclaimer and Reporting Methodology

#### **Information Disclaimer**

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to
  ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank.
   Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
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#### **Reporting Methodology**

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC
  cannot guarantee that any plan will achieve its targeted return or meet other goals.



# University of Maine System Pension Plan

# Total Plan Performance Detail (Net of Fees)

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Pension Composite	31,143,944	100.0	100.0	0.6	3.5	9.3	10.4	6.6	3.9	5.9	6.1	3.7
Allocation Index				1.0	5.0	11.4	12.6	8.0	5.3	7.0	7.0	4.3
Policy Index				0.9	4.8	11.3	12.5	8.3	5.5	7.2	7.2	5.1
Total Domestic Large Cap	2,529,091	8.1	8.0	3.1	10.2	20.5	22.9	15.2	10.9	15.6	13.7	6.8
S&P 500				3.1	10.2	20.5	22.9	15.2	10.9	15.7	14.6	8.3
Vanguard S&P 500 Index	2,529,091	8.1	8.0	3.1	10.2	20.5	22.9	15.2	10.9			
S&P 500				3.1	10.2	20.5	22.9	15.2	10.9	15.7	14.6	8.3
Total Small Cap Composite	1,285,417	4.1	4.0	2.9	9.6	15.1	18.3	15.2	11.1	14.8	12.6	
Russell 2000				2.9	9.6	15.1	18.3	15.2	11.1	15.0	12.9	8.7
SSgA R2000 Index Fund Non Lending	1,285,417	4.1	4.0	2.9	9.6	15.1	18.3	15.2	11.1	14.8	12.7	
Russell 2000				2.9	9.6	15.1	18.3	15.2	11.1	15.0	12.9	8.7
Total International Equity (including emerging markets)	3,295,239	10.6	10.0	2.1	5.5	21.4	23.9	8.5	3.6	5.1	5.9	1.5
MSCI EAFE				1.0	8.1	23.1	27.3	10.7	6.0	8.2	7.0	1.5
Morgan Stanley Int'l	2,293,424	7.4	7.0	1.7	6.2	24.0	28.4	9.4	5.5	7.3	7.5	2.6
MSCI EAFE				1.0	8.1	23.1	27.3	10.7	6.0	8.2	7.0	1.5
Emerging Markets Equity	1,001,815	3.2	3.0	3.0	4.2	16.2	15.1	6.9	-0.5	0.3		
MSCI Emerging Markets				0.2	11.9	32.5	32.8	20.0	6.1	4.6	3.1	1.4
Mondrian EM Small Cap	1,001,815	3.2	3.0	3.0	4.2	16.2	15.1	6.9	-0.5			
MSCI Emerging Markets Small Cap				1.8	11.3	29.1	28.9	14.9	6.1	5.6	2.4	2.5
Total Fixed Income	9,747,488	31.3	32.0	-0.1	0.9	3.5	3.9	3.3	2.2	2.3	3.5	5.1
BBgBarc US Aggregate TR				-0.1	0.8	3.1	3.2	2.7	2.1	2.0	3.0	4.0
Vanguard Total Bond Market Index	6,236,573	20.0	20.0	-0.2	0.7	3.1	3.4	2.7		_		
BBgBarc US Aggregate TR				-0.1	0.8	3.1	3.2	2.7	2.1	2.0	3.0	4.0
Vanguard Inflation-Protected Securities	2,003,054	6.4	7.0	0.0	1.1							
BBgBarc US TIPS TR				0.1	1.2	2.1	2.0	3.0	1.4	-0.2	2.6	3.4
Guggenheim US Bank Loans	1,507,861	4.8	5.0	0.2	1.7							
Credit Suisse Leveraged Loans				0.1	1.8	3.8	5.0	6.3	4.0	4.4	4.8	4.6



November 30, 2017

## University of Maine System Pension Plan

# Total Plan Performance Detail (Net of Fees)

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Total GAA	8,631,550	27.7	27.5	0.2	3.2	10.4	11.6	6.6	2.6	3.7	3.8	
65% MSCI ACWI (Net) / 35% BBgBarc Global Agg				1.6	7.0	16.6	18.0	10.6	5.9	7.3	7.1	4.2
Wellington	4,469,205	14.4	13.8	0.1	5.6	16.4	17.6	10.0	6.7	7.0	4.9	
65% MSCI ACWI (Net) / 35% BBgBarc Global Agg				1.6	7.0	16.6	18.0	10.6	5.9	7.3	7.1	4.2
Newton Global Real Return	4,162,345	13.4	13.8	0.3	0.7	4.5	5.6			-		
60% MSCI ACWI (Net) / 40% CITI WGBI				1.7	6.7	15.9	17.1	10.2	5.5	6.5	6.4	4.0
Total Alternative Investments	2,465,338	7.9	7.5	-0.5	2.8	4.4	5.2	3.3	1.7	3.1	2.1	
HFRI Fund of Funds Composite Index				0.0	3.6	6.9	7.8	3.4	2.5	4.1	2.9	1.0
EntrustPermal	764,854	2.5	2.5	-0.5	8.0	1.7	2.9	2.1	0.5	3.3	3.1	
HFRI Fund of Funds Composite Index				0.0	3.6	6.9	7.8	3.4	2.5	4.1	2.9	1.0
Lighthouse	1,700,484	5.5	5.0	-0.5	3.8	6.2	6.6	4.0				
Credit Suisse Long Shrt Eqt USD				0.4	5.5	12.5	13.4	4.2	4.1	7.3	5.4	4.0
Total Real Assets	2,650,197	8.5	8.0									
Principal	2,650,197	8.5	8.0	0.7	3.4	7.5	8.3	9.0	10.9	11.3	12.3	4.2
NCREIF ODCE				0.0	1.9	5.4	7.7	8.9	10.8	11.6	12.5	5.0
Total Cash	539,625	1.7	3.0									
Distribution Account	539,625	1.7	3.0	0.1	0.3	0.5	0.5	0.3	0.2	0.1	0.1	0.4
91 Day T-Bills				0.1	0.4	0.8	0.9	0.6	0.4	0.2	0.2	0.3

Notes:

Fiscal YTD begins 7/1

Blended Index: 40% BC Aggregate, 30% BC U.S. TIPS 1-10YR, 10% S&P 500, 10% BC High Yield, 10% JPM EMBI+

Returns are net of manager fees

Distribution Account includes \$250K in transit from Vanguard

## University of Maine System Pension Plan

# Total Plan Performance Detail Cash Flow Summary

### Month Ending November 30, 2017

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Distribution Account	\$552,569	\$350,000	-\$363,525	-\$13,525	\$0	\$581	\$539,625
EntrustPermal	\$768,553	\$0	\$0	\$0	\$0	-\$3,699	\$764,854
Guggenheim US Bank Loans	\$1,505,119	\$0	\$0	\$0	-\$628	\$2,741	\$1,507,861
Lighthouse	\$1,709,659	\$0	\$0	\$0	\$0	-\$9,175	\$1,700,484
Mondrian EM Small Cap	\$971,839	\$0	\$0	\$0	-\$1,252	\$29,976	\$1,001,815
Morgan Stanley Int'l	\$2,255,264	\$0	\$0	\$0	-\$1,816	\$38,160	\$2,293,424
Newton Global Real Return	\$4,150,886	\$0	\$0	\$0	-\$2,775	\$11,459	\$4,162,345
Principal	\$2,631,892	\$0	\$0	\$0	\$0	\$18,305	\$2,650,197
SSgA R2000 Index Fund Non Lending	\$1,346,590	\$0	-\$100,258	-\$100,258	-\$86	\$39,085	\$1,285,417
Vanguard Inflation-Protected Securities	\$2,003,054	\$0	\$0	\$0	-\$117	\$0	\$2,003,054
Vanguard S&P 500 Index	\$2,696,407	\$0	-\$250,000	-\$250,000	-\$84	\$82,684	\$2,529,091
Vanguard Total Bond Market Index	\$6,246,754	\$0	\$0	\$0	-\$364	-\$10,181	\$6,236,573
Wellington	\$4,469,295	\$0	-\$7,493	-\$7,493	-\$4,097	\$7,403	\$4,469,205
Total	\$31,307,880	\$350,000	-\$721,276	-\$371,276	-\$11,218	\$207,340	\$31,143,944



## Information Disclaimer and Reporting Methodology

#### **Information Disclaimer**

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to
  ensure profit or protect against losses.
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   Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
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- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC
  cannot guarantee that any plan will achieve its targeted return or meet other goals.



### University of Maine System Operating Fund

# Total Plan Performance Detail (Net of Fees)

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Operating Funds Composite	279,123,243	100.0	100.0	0.1	1.5	3.9	4.5	3.5	1.9	2.2	2.5	2.4
Allocation Index				0.3	1.8	4.3	4.8	3.4	2.3	2.5	2.5	
Liquidity Pool Composite	48,416,710	17.3	25.0	0.1	0.4	0.8	0.8	0.6	0.5	0.3	0.3	0.7
State Pool	22,120,403	7.9		0.1	0.5	0.9	0.9	0.7	0.6	0.4	0.4	0.7
BOA General Fund	286,084	0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Federated Gov't Obligations	1,085,176	0.4		0.1	0.4	0.7	0.7					
JP Morgan US Gov't Money Market Fund	24,925,047	8.9		0.1	0.4	0.7	0.7					
Citi 3mth Treasury Bill				0.1	0.4	0.7	0.8	0.5	0.3	0.2	0.2	0.4
Income Pool Composite	152,209,304	54.5	50.0	-0.1	0.6	1.9	2.3	2.5	1.8	1.8	2.4	2.9
Income Research + Management	81,125,946	29.1	26.7	-0.2	0.1	0.9	1.0	1.1	1.0	0.9		
BBgBarc US Govt/Credit 1-3 Yr. TR				-0.2	0.1	0.8	0.9	1.0	0.8	0.8	1.0	1.9
BlackRock Strategic Income Opportunities	20,311,401	7.3	6.7	0.0	1.8	4.3	5.1	3.6				
3-Month Libor Total Return USD				0.1	0.6	1.2	1.3	1.0	0.8	0.6	0.5	0.8
Loomis Sayles Bank Loans	20,331,849	7.3	6.7	0.1	1.5	2.8	3.7	4.9	3.4	3.4	4.0	3.9
Loomis Bank Loans Custom Index				0.2	1.7	3.1	3.9	4.9	3.9	4.2	4.7	4.9
Vanguard Total Bond Market Instl' Fund	14,891,677	5.3	5.0	-0.2	0.7	3.1	3.4	2.7	2.1	1.9	2.9	
BBgBarc US Aggregate TR				-0.1	0.8	3.1	3.2	2.7	2.1	2.0	3.0	4.0
Vanguard Inflation-Protected Securities	15,548,431	5.6	5.0	0.0	1.0							
BBgBarc US TIPS TR				0.1	1.2	2.1	2.0	3.0	1.4	-0.2	2.6	3.4
Total Return Pool Composite	78,497,229	28.1	25.0	0.7	4.8	11.7	13.3	8.9	4.4	5.1	5.4	4.5
Lighthouse	13,948,736	5.0	5.0	-0.5	3.8	6.2	6.5	4.0				
Credit Suisse Long Shrt Eqt USD				0.4	5.5	12.5	13.4	4.2	4.1	7.3	5.4	4.0
Newton Global Real Return	20,051,550	7.2	6.3	0.3	0.7	4.5	5.6					
60% MSCI ACWI (Net)/ 40% BBgBarc Global Agg				1.6	6.6	15.8	17.1	10.2	5.6	6.8	6.7	4.1
PIMCO All Asset	20,170,988	7.2	6.3	0.5	4.5	11.9	13.9	11.7	3.9	3.7	5.0	5.1
Blended Index				0.1	1.9	5.1	5.7	5.1	3.4	3.3	4.5	4.9
Vanguard Total World Stock Index	24,325,955	8.7	7.5	1.9	9.5	22.4	24.7	14.2	8.6			
FTSE Global All Cap Index				2.0	9.6	22.2	24.9	14.2	8.7	11.5	9.7	4.0

#### Notes:

Returns are net of manager fees.

The inception date for the allocation index is 07/01/2009

Fiscal YTD begins 7/1

Blended Index: 40% BC Aggregate / 30% BC U.S. TIPS 1-10YR / 10% S&P 500 / 10% BC High Yield / 10% JPM EMBI+

Loomis Bank Loans Custom Index blends performance of "S&P/LSTA Leveraged Loan Index" before 9/1/2014 and "S&P/LSTA Leveraged BB Loan Index" after 9/1/2014.

Composite excludes external loans.

## University of Maine System Operating Fund

# Total Plan Performance Detail Cash Flow Summary

### Month Ending November 30, 2017

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
BlackRock Strategic Income Opportunities	\$20,321,187	\$0	\$0	\$0	-\$10,156	-\$9,786	\$20,311,401
BOA General Fund	\$22,087,715	\$0	-\$21,801,631	-\$21,801,631	\$0	\$0	\$286,084
Federated Gov't Obligations	\$484,379	\$600,000	\$0	\$600,000	\$0	\$797	\$1,085,176
Income Research + Management	\$81,283,256	\$0	\$0	\$0	-\$15,732	-\$157,310	\$81,125,946
JP Morgan US Gov't Money Market Fund	\$13,306,164	\$11,600,000	\$0	\$11,600,000	\$0	\$18,883	\$24,925,047
Lighthouse	\$14,023,996	\$0	\$0	\$0	\$0	-\$75,260	\$13,948,736
Loomis Sayles Bank Loans	\$20,310,118	\$0	\$0	\$0	-\$7,963	\$21,731	\$20,331,849
Newton Global Real Return	\$19,996,840	\$0	\$0	\$0	-\$13,368	\$54,710	\$20,051,550
PIMCO All Asset	\$20,071,624	\$0	\$0	\$0	-\$14,960	\$99,364	\$20,170,988
State Pool	\$42,080,672	\$0	-\$20,000,000	-\$20,000,000	\$0	\$39,731	\$22,120,403
Vanguard Inflation-Protected Securities	\$15,548,431	\$0	\$0	\$0	-\$907	\$0	\$15,548,431
Vanguard Total Bond Market Instl' Fund	\$14,915,988	\$0	\$0	\$0	\$0	-\$24,311	\$14,891,677
Vanguard Total World Stock Index	\$23,862,696	\$0	\$0	\$0	-\$3,446	\$463,259	\$24,325,955
Total	\$308,293,065	\$12,200,000	-\$41,801,631	-\$29,601,631	-\$66,532	\$431,809	\$279,123,243



# University of Maine System Operating Fund

# Fee Schedule

Account	Fee Schedule	Market Value As of 11/30/2017	% of Portfolio	Est. Minimum Annual Fee (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Liquidity Pool Composite	No Fee	\$48,416,710	17.3%			
State Pool	No Fee	\$22,120,403	7.9%			
BOA General Fund	No Fee	\$286,084	0.1%			
Federated Gov't Obligations	No Fee	\$1,085,176	0.4%			
JP Morgan US Gov't Money Market Fund	No Fee	\$24,925,047	8.9%			
Income Pool Composite	No Fee	\$152,209,304	54.5%			
Income Research + Management	0.25% of First \$25.0 Mil, 0.23% Thereafter	\$81,125,946	29.1%		\$188,783	0.23%
BlackRock Strategic Income Opportunities	0.60% of Assets	\$20,311,401	7.3%		\$121,868	0.60%
Loomis Sayles Bank Loans	0.47% of First \$100.0 Mil, 0.40% Thereafter	\$20,331,849	7.3%		\$95,560	0.47%
Vanguard Total Bond Market Instl' Fund	0.07% of Assets	\$14,891,677	5.3%		\$10,424	0.07%
Vanguard Inflation-Protected Securities	0.07% of Assets	\$15,548,431	5.6%		\$10,884	0.07%
Total Return Pool Composite	No Fee	\$78,497,229	28.1%			
Lighthouse	No Fee	\$13,948,736	5.0%			
Newton Global Real Return	0.80% of Assets	\$20,051,550	7.2%		\$160,412	0.80%
PIMCO All Asset	0.89% of Assets	\$20,170,988	7.2%		\$179,522	0.89%
Vanguard Total World Stock Index	0.17% of Assets	\$24,325,955	8.7%		\$41,354	0.17%
Investment Management Fee		\$279,123,243	100.0%		\$808,808	0.29%



## Information Disclaimer and Reporting Methodology

#### **Information Disclaimer**

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to
  ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank.
   Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

#### **Reporting Methodology**

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC
  cannot guarantee that any plan will achieve its targeted return or meet other goals.



### **VCAA Report**

### 1. Task Force - Collaborative Approval of Multi-Campus Programs

Membership: Blake Whitaker (USM faculty), Carolyn Dorsey (UMPI faculty), Garret Lee (UMM faculty), Peter Precourt (UMA faculty), Clayton Wheeler (UM faculty), Scott Erb (UMF faculty), Jenny Radsma (UMFK faculty), Jeffrey St. John (UM, Senior Associate Provost), Sally Meredith (USM, Chief of Staff to the Provost), Carol Kim (UMS, AVCAIP), R. Neely (UMS, VCAA)

The first meeting of the task force regarding multi-campus program approval processes on December 18, 2017 focused on three general issues, and two possible strategies:

### Overarching Issues:

- A. Identification of a collaborative approach for consideration of multi-campus programs;
- B. Recognition of the need to be more nimble with respect to academic programming approval and implementation;
- C. Communication and transparency needed at all states of program exploration and development.

### Possible Strategies:

- A. Creation of a multi-campus curricular committee. This was discussed in the context of using sub-committees or standing committees of Faculty Senates/Assemblies. Suggestions for possible membership on a multi-campus curricular committee included faculty and/or Faculty Senate/Assembly representation, 1 2 Chief Academic Officers, UMS Academic Affairs office, individual(s) responsible to reporting out to all vested parties.
- B. As an extension of the multi-campus curricular committee, an idea was offered of appointing curriculum development scholars, who might serve on the committee or participate in other ways as communication liaisons for multi-campus programming.

The task force will come back together in January for further discussion of these ideas. In the meantime, the UMS office will also conduct some background information collection for system examples of approaches to evaluation and approval of multi-campus programs.

### 2. Collaborative Master's Programs

The President's Council and the Chief Academic Officers Council met in a joint session on November 18, 2017 to consider the potential for shared collaborative master's degrees. From a list of >30 programs areas identified during that discussion, six areas were designated for priority action: Cybersecurity, MSN, Emergency Response/Risk Management, Education, Athletic Training, Criminal Justice and Criminology. Team leaders have been identified and the work is being launched immediately.

### 3. Administrative Program Integration Teams

Late in the 2016-2017 academic year, three administrative program integration teams were launched to deal with barriers impeding the development of collaborative, multi-campus programs. The three teams were created in the areas of student issues, financial issues, and library access constraints.

In the Fall, 2017 semester, the student and financial teams met in a joint meeting, which resulted in:

- a. a decision to pilot a course cross-listing methodology as a mechanism for simultaneously addressing obstacles that students face in multi-campus programs and a process for automated revenue sharing in any multi-campus program.
- b. initial planning and assignments to develop a comprehensive guide for the development, requirements and governance of multi-campus programs.

The cross-listing methodology is actively being evaluated, and the revenue-sharing model has been presented to the CBOs. It is possible that other technological solutions eventually may come into play from an IT perspective, but the cross-listing methodology continues to remain a viable option for facilitating multi-campus programming. The development of the guide to multi-campus programs is still in the early stages, but will unfold rapidly with any decision to move forward with course cross-listing as a requirement for all multi-campus programs.

The Library Administrative Program Integration team, chaired by Carol Kim, began their work in mid-summer and submitted a report of their findings on December 22, 2017. The primary charge to this group was to identify the costs and challenges to creating a common catalog of holdings systematically available across the UMS campuses, if not the state of Maine. To assist with deliberations regarding the state, Jamie Ritter, the Maine State Librarian, also participated on the committee. The costs of a completely common catalog are substantial, perhaps ultimately requiring as much as \$5.5M/year in base funding; however, this estimate is predicated on current pricing and contracts serving UMaine. During Spring, 2018, the State of Maine will be undergoing an RFP process to identify a vendor to provide library materials for the State Library and its affiliates; this RFP will include an added request regarding a bid to collaboratively serve both the State's needs and the Universities. Early projections are for possible savings ranging from 20 – 40% from the current estimate, which while significant would still leave a sizeable financial gap to fill in support of a uniformly accessible catalog.

The Library PI team also provided an estimate of cost if shared materials were limited to only those items necessary for multi-campus programs. This estimate is more manageable with an approximate \$1.2M start-up cost (for archive purchases), and an ongoing base-budget requirement of about \$252K/year.

### **VCAA Report: Early College Status**

Throughout the summer and early in the fall semester of 2017, a team of four CAOs, other campus staff, and UMS staff prepared recommendations regarding the goals, governance structure, budget oversight, and general guidance regarding a coordinated approach to all Early College (EC) efforts within the UMS. As described below, two key elements of those recommendations will unfold during January, 2018.

The EC mission statement, endorsed by the UMS Presidents Council and Chief Academic Officers Council, is "to positively impact rates of educational attainment and success by offering early college opportunities for Maine's high school students." More specifically, the goals are to:

- 1. increase high school graduation rates;
- 2. increase the number of high school graduates attending a four-year university;
- 3. increase the number of college students graduating with a degree;
- 4. minimize the need for developmental courses and better prepare students to be successful in college;
- 5. expand access to and opportunity for early college experiences across the state of Maine and to ultimately increase the numbers of Maine students who go onto college;
- 6. minimize the debt load of graduating college students;
- 7. improve the state's overall educational environment through
  - a. connections between higher education and secondary education,
  - b. providing professional development and educational opportunities to high school teachers
- 8. improve the lifetime earnings of Maine's citizens.

Governance of EC activities across the seven campuses of the UMS will consist of a three-fold structure.

- 1. A Lead Coordinator, reporting to the VCAA, to
  - facilitate/convene/oversee the "EC Quality Oversight Team" (see below),
  - serve as the point person at the System level,
  - interface with Maine DOE, Schools, UMS campuses, and potentially MCCS,
  - be responsible for annual reporting on EC activities, and
  - be responsible for working with the campuses in the development of assessment plans and other IR/data.
- 2. An *Early College Governance Council* to oversee all UMS activities related to EC, and to review and act on all recommendations coming from the "Quality Oversight Team" (see below). The Council will be comprised of a subset of Chief Academic Officers, the UMS Chief Student Affairs Officer and the Vice Chancellor for Academic Affairs.

3. An *Early College Quality Oversight Team* comprised of campus-based Early College Coordinators and other appropriate constituents. The group is envisioned to include representation from faculty participating in overseeing Early College programs, a member from student affairs/advising/student services and appropriate representation from the high schools, with responsibility for offering recommendations regarding quality-assurance around NEASC standards/NACEP accreditation, administration and oversight of EC expansion, and alignment of policies and processes related to EC across the campus and with the high schools.

With currently \$3M in funding from the State of Maine to support EC programming, the UMS will use these funds specifically to support EC program growth and quality enhancement. At the level of the System, approximately \$266K will be used in support of: a Lead EC Coordinator (who will coordinate the work of campus EC coordinators, interactions with high schools, resolution of quality concerns, etc.), scholarships to recruit students to a UMS campus as a result of participating in UMS Early College programming, an Early College Summit in which UMS faculty and high school faculty are brought together, workshops to assist high school guidance counselors, UMS institutional research related to success of Early College students, and minor funding for support of EC coordination and oversight across the UMS campuses. System support is 8.9% of the funding available.

The remaining +90% of the state funding will be used to support Early College activities occurring through individual UMS campuses. Campuses must apply for these funds, which can only be used to expand their Early College enrollments or to improve quality oversight of existing efforts. In general, but not exclusively, funds can be requested by campuses in support of: faculty participation (oversight, liaisons, coordinators, etc.), faculty or administrator travel to high schools, scholarships to allow students to participate in Early College courses, marketing and website development for EC, recognition events for EC students, etc. The guidelines for application of funds are presented in the Appendix.

The search for an EC Lead Coordinator began in late November, 2017 and should conclude during January, 2018. Campus proposals in support of their EC efforts are due on January 29, 2018. Financial support is also available for new, campus-based EC efforts that were initiated after July 1, 2017.

The next update to the UMS Board of Trustees in May, 2018 will include a:

- 1. summary of campus EC initiatives funded, with expectations regarding outcomes;
- 2. summary of marketing and website efforts to expand EC;
- 3. report on early work of the EC Lead Coordinator.

### **Appendix: Guidelines - Early College Block Grant Funds**

Resources have been made available from the Early College (EC) funds to help UMS campuses increase EC enrollment, improve programs, retention, etc. There will be at least two, and perhaps three, opportunities for requesting these funds:

- 1) reimbursement for campus investments to grow EC enrollments during the current fiscal year, i.e., expenditures since **July 1, 2017**. Such requests can be submitted at any time to the VCAA office beginning November 30, 2017, and should include an itemized list of expenditures with a brief description of how these expenditures were intended to increase EC enrollment.
  - Obtaining data to indicate the increase in enrollment over the previous academic year would provide strong evidence
  - DUE MONDAY, JANUARY 29, 2018
- 2) requests for funding to support new investments going forward in EC programs to expand or improve quality. Such requests should address:
  - What is the new initiative or expansion of current strategies, with rationale, to grow EC enrollment or improve EC academic quality?
  - What is the timeline for implementation?
  - What will be the benchmarks for successful use of these funds?
  - Itemized list of anticipated expenditures;
  - Who will manage use of these funds?
  - How will the initiative increase the number of students matriculating to college?
  - Will the initiative help meet state workforce needs?
  - Funds for EC staff are expected to increase the total number of EC staff who will work to expand EC programs
  - DUE MONDAY, JANUARY 29, 2018
- 3) general or miscellaneous funds should surplus funds be available after meeting the projected needs of campuses, with the process yet to be determined.

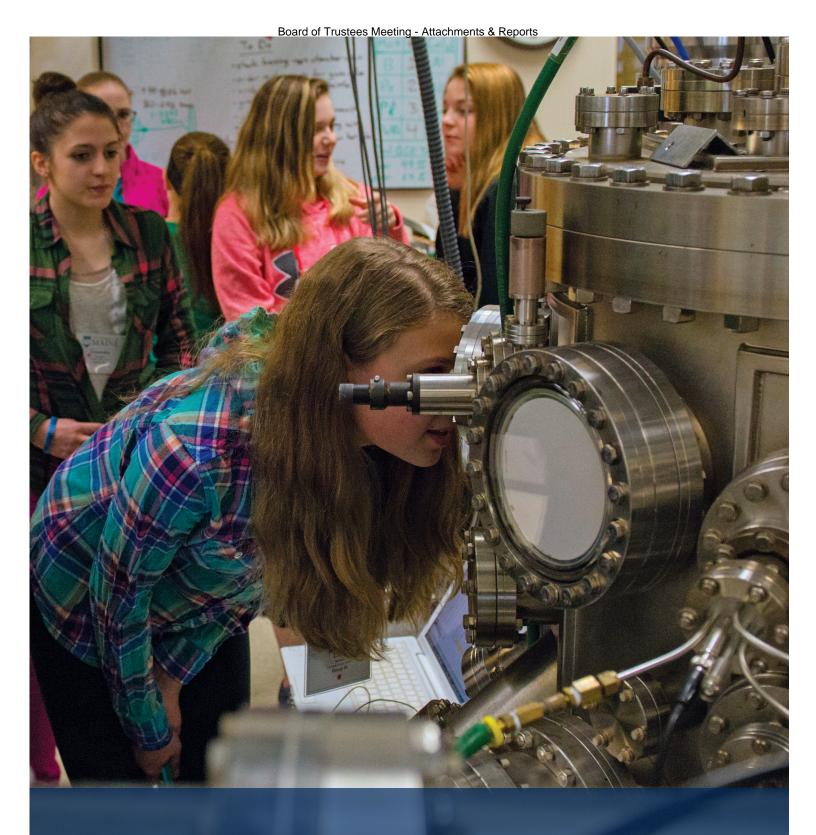
### Procedures:

1. Applications should be submitted to the VCAA office. The applications should be brief, concise, but comprehensive narrative proposals (no more than 1-2 pages) that provide data and explanations for requests for funding for both reimbursement and new investments with the Block Grant Funds. Separate spreadsheets with brief explanations or budget justifications should be included.

### 2. Reporting Requirements

- a. Each semester progress will be assess against the benchmarks that have been stated in the proposal
- b. An annual report with enrollment figures and impact measures will be required stating how the use of the fund aided in accomplishing set goals/benchmarks
- c. A review of the budget will be required at the end of each semester and for the annual report.

PLEASE NOTE: As the UMS campus Early College programs work toward NACEP accreditation, all of the requests made for these funds must align with NACEP accreditation recommendations.





Board of Trustees
4-H STEM Ambassadors
FINAL REPORT

# Board of Trustees 4-H STEM Ambassadors Final Report

In 2014, University of Maine Cooperative Extension was awarded \$100,000 from the University of Maine System Board of Trustees to expand the UMaine-based 4-H STEM Ambassador Program to campuses in the University of Maine System. The 4-H STEM Ambassador Program consists of trained undergraduate and graduate students delivering experiential STEM activities to youth at community host sites. The program reflects the vision of the UMS One University Initiative: service to every Maine community; access to learners of all ages and locations; statewide partnerships; and world-class research.

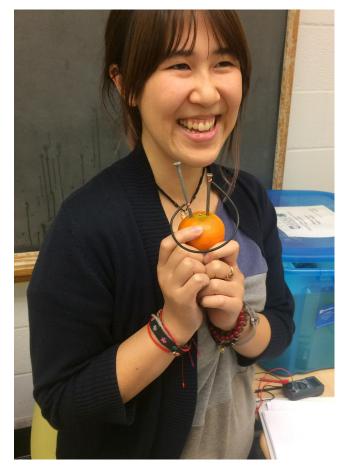
**Growth and reach of the program:** Over three years, the funding received from the University of Maine System (UMS) Board of Trustees has enabled the growth of the program, from engaging one to two undergraduate students per semester at one location to over 100 UMS students connecting with over 1,000 youth per academic year (Table 1). The 4-H STEM Ambassador program is active in six of the seven UMS campuses, with the seventh on track to join in spring 2018. Our initial proposal estimated annual participation of 14 4-H STEM Ambassadors and 112 youth. This number was exceeded in our first year.

Table 1: Growth of the 4-H STEM Ambassador Program

Academic year:	2013–14	2014–15	2015–16	2016–17	Fall 2017
Youth impacted	16	1,000	1,220	1,026	400*
4-H STEM Ambassadors	2	85	121	105	64
Community sites	2	28	70	63	30
*Estimate					

**Use of University of Maine System Funding:** Our award of \$100,000 was used for staffing support for the program, materials and supplies, and travel for staff and the 4-H STEM Ambassadors. Details include:

- **1. Salary and fringe:** One 4-H science youth development professional and a 4-H community education assistant were hired to support the program expansion. With additional support from UMaine Extension, these positions will continue. Approximately \$65,000 was spent on compensation, including salaries and benefits.
- **2. Travel:** Travel was primarily used to support 4-H STEM Ambassadors to travel from their university to host sites. Additional use of travel funding included meetings with host sites and faculty at UMS campuses, and travel to present at conferences. Approximately \$5,000 was spent on travel.



3. Materials and supplies: Materials and supplies include curricula and the materials needed for the 4-H STEM Ambassadors to facilitate hands-on experiential learning activities. These took the form of 4-H Science Toolkits used throughout the University of Maine System. Kits were developed to meet the needs of faculty at individual campuses. For example, chemistry kits were developed for use by the University of Maine Machias students, and mathematics kits for University of Maine at Augusta students. Other materials included branded lanyards to identify students when visiting host sites. Approximately \$30,000 was spent on materials and supplies to support the program.



### Leveraged funding and research opportunities:

**Staff support:** 4-H program staff are now partially supported by the following external funding sources:

- NSF EPSCoR (SEANET)
- NSF ITest (Segee)
- NSF INCLUDES (Musavi)
- National 4-H Google Computer Science Pathways

Several proposals have been submitted by faculty and staff to support the program. Support has been received (for development of experiential learning activities and 4-H science toolkits) from the Maine 4-H Foundation, the Alton S. Hamm Campus Activity Fund, the Maine Mineral and Gem Museum, Texas Instruments, and the Maine Outdoor Heritage Fund. The 4-H STEM Ambassador Program will also be included in the vice chancellor for academic affairs' Program Innovation Fund proposal "Creating a B.S. in Data Science" (PI Dr. Joseph Szakas, University of Maine at Augusta).

**Research potential:** The 4-H STEM Ambassadors Program has gained multi-institutional research interest across the University of Maine System. A team of faculty researchers and 4-H staff are collaborating to seek funding to conduct research on the impact of the program on UMS student participants.

**Return on investment:** Through this program, UMS is now reaching over 1,000 youth annually, and providing meaningful experiences for over 100 undergraduate students. If using a value of \$21.61 per hour for the volunteer time served by these students (2016 value from independentsector.org/resource/the-value-of-volunteer-time), and estimating six hours of direct service for each student STEM Ambassador, we can estimate 4-H STEM Ambassadors provided a value of \$48,800 to the local communities served to date.

# "Science is very, very fun and we need more science projects!"

Youth participant Spring 2016

### **Program outcomes**

### Youth

Youth participants reported enjoying the program and liking the science activities. Most indicated an interest in studying science or STEM topics in the future. For many area youth, this may be their first experience with a UMS campus. Positive interactions with 4-H STEM Ambassadors support young people seeing themselves as future college students.

### **UMS students**

4-H STEM Ambassadors demonstrate increased confidence in communicating STEM research and indicate a sense of belonging as part of a bigger program within their communities. They also reported the experience has increased their knowledge of STEM education best practices, and problem-solving and leadership skills. Almost all (98 percent) indicated that participation in the program increased their communication skills, and their comfort and confidence in facilitating STEM activities with youth. Over 85 percent indicated that participation in the program has increased their intention to volunteer in the future.

### **Host sites/community partners**

One program outcome has been engaging community partners (schools, after-school programs, libraries, clubs, etc.) with UMS campuses. Many community partners had previously not been connected with UMS. One local after-school program leader said the program has "really added value to what we are trying to accomplish with these kids. They are able to see someone closer to their own age, doing science and math and making it fun. It has also helped us feel closer to our local university."

### **Sustainability**

To increase the long-term sustainability of the 4-H STEM Ambassador Program, we do not directly pay 4-H STEM Ambassadors unless special conditions apply, such as being part of a research project. Therefore, the primary costs of the program do not include student wages. Costs include staff time, travel, materials and supplies for training, and for 4-H science toolkits. UMS students participate in the program either by volunteering or, increasingly, as part of a community service requirement for an academic course. Partnerships with UMS campus faculty and administration are leading to creative ways to ensure continuation of the program.



Students at the **University of Maine** may earn academic credit for participating in the 4-H STEM Ambassador Program through the College of Liberal Arts and Sciences (LAS

395). Many students simply volunteer, but faculty are allowing the 4-H STEM Ambassador Program to be a community service option for some classes.



The **University of Southern Maine** has sought funding and secured a multiyear AmeriCorps VISTA position to support building sustainability of 4-H

STEM Ambassadors. Space and resources have been secured to provide specific support to USM students and the community. At least seven teaching faculty from the College of Science, Health and Technology have embedded the program in their course syllabi as an option for increased community engagement and science teaching experience. The program is also a pathway for service in the Honors College.

"Through this program, responsibility, collaboration and creativity are learned or improved. I learned to better manage my time when trying to balance the STEM activities and my regular course load. It was very challenging. Nonetheless, once we would finish an activity, the feeling of achievement was very satisfactory."

**USM 4-H STEM Ambassador, Spring 2016** 

"Last session was awesome! The kids were great and they loved the activity. I can't wait for this week's session."

USM 4-H STEM Ambassador, Fall 2017

"It is always powerful to have women role models, and for our young women to be asking questions, probing, thinking and connecting with younger learners — great!"

USM 4-H STEM Ambassador, Fall 2017





The **University of Maine at Farmington** has incorporated
STEM Ambassadors into science

teaching methods courses, providing field experiences not traditionally offered during those classes. UMF has plans to expand, reaching new students in other majors (in addition to education) in spring 2018.



The **University of Augusta** faculty have incorporated the 4-H STEM Ambassador Program into math

teaching methods courses as a way of meeting a community service requirement. UMA also promotes the program for students to volunteer. UMA students serve as 4-H STEM Ambassadors in courses offered online and from University College Centers, increasing the geographic scope of the program. UMA students have engaged youth in Aroostook, Kennebec, Lincoln, Oxford, Penobscot, Washington and York counties.



The University of Maine at Machias has been successful recruiting students in STEM-

related programs and engaging them in various communities in Washington County. The program is working to expand by partnering with the NSF ESPCoR SEANET program to implement aquaculture education outreach. Faculty are incorporating the program into biology and chemistry courses.





The University of Maine at Presque Isle and University of Maine Fort Kent continue to develop relationships and pilot programs to best meet the needs of Aroostook County. The STEM program has leveraged local

resources by establishing connections through the AmeriCorps Campus Compact VISTA and the Aroostook County 4-H professional. Through a collaboration with the UMPI College of Education, 4-H STEM Ambassadors will increase participation in spring 2018 at both the UMPI and UMFK campuses.

Our largest barriers to long-term sustainability are the replacement of materials and supplies, and travel support for student 4-H STEM Ambassadors.



### 4-H STEM Ambassadors earn Digital Badges

The Davis Foundation is supporting an initiative at UMaine intended to increase retention of students by actively engaging them in their community. The Engaged Black

Bear Initiative awards digital badges to UMaine students who demonstrate leadership while engaging with their campus and community. Through this initiative, we are awarding digital badges for students from all campuses who participate in the 4-H STEM Ambassador Program. These badges serve as an electronic certificate of accomplishment, and provide future employers with a glimpse of the community engagement activities these students have completed.

Without the support from the University of Maine System Board of Trustees, the 4-H STEM Ambassador program would not have expanded to include all UMS campuses. The support allowed an increase in staffing to, in turn, further the development of partnerships at the campuses. The support of UMS Board of Trustees also was the impetus for campus provosts and faculty to first engage with 4-H staff to explore hosting the program at their locations. "Because of the tremendous success of the 4-H STEM Ambassador Program, UMaine Extension is committed to continuing the program and will continue to seek out partnerships and future funding opportunities with other UMS campuses," says Lisa Phelps, state program leader of the Maine 4-H Program. We are grateful to Chancellor Page and UMS Board of Trustees for their encouragement and support, allowing us to expand to become a true One University program.



#### For more information

Laura Wilson 4-H Science Professional, 207.581.2971, laura.wilson@maine.edu

5741 Libby Hall, Room 103A, Orono, ME 04469-5741

Sarah Sparks 4-H Science Professional, 207.353.5550, sarah.sparks@maine.edu

24 Main St., Lisbon Falls, ME 04252

Gregory Kranich 4-H Science Youth Development Professional, 207.581.3292, gregory.kranich@maine.edu

5741 Libby Hall, Room 103D, Orono, ME 04469-5741

Lisa Phelps, Ph.D. 4-H Program Administrator, 207.356.3851, lisa.phelps@maine.edu

5741 Libby Hall, Orono, ME 04469-5741

# Statewide Reach of the UMS 4-H STEM Ambassadors Program



Location of University of Maine System campuses (stars) and 4-H STEM Ambassador Program Host Sites (pins).

The University of Maine does not discriminate on the grounds of race, color, religion, sex, sexual orientation, including transgender status and gender expression, national origin, citizenship status, age, disability, genetic information or veteran status in employment, education, and all other programs and activities. Contact the Director, Equal Opportunity, 5754 North Stevens Hall, Room 101, Orono, ME 04469-5754 at 207.581.1226 (voice), TTY 711 (Maine Relay System), equal.opportunity@maine.edu with questions or concerns.

#### **Board Policy:**

#### **Institutional Authority on Political Matters**

#### Introduction

The University of Maine System is a public institution and instrumentality of the State of Maine, consisting of the University of Maine, including its regional campus the University of Maine at Machias; the University of Maine at Augusta, including its campus in Bangor and University College centers around the state; the University of Maine at Farmington; the University of Maine at Fort Kent; the University of Maine at Presque Isle; and the University of Southern Maine, including its campuses in Gorham and Lewiston-Auburn. UMS's public mission is to advance higher education in Maine through teaching, research, and public service; the System and its campuses receive significant state and federal taxpayer support to do so in ways that best serve all Maine citizens.

Because UMS is funded in significant part by all Maine taxpayers and student tuition revenue sourced from federal financial aid programs, and because UMS must also maintain its federal 501(c)(3) tax-exempt status, the System and its universities, as well as all officials acting on their behalf, will adopt, pursue, advocate for, or publicly comment on political matters, legislative outcomes, or partisan political candidates only as permitted in this policy.

It is intended that this policy be read, interpreted, and administered in conjunction with Board Policy 212, Free Speech, Academic Freedom, and Civility, so as to best respect all UMS community members' constitutionally protected free speech rights and faculty academic freedom. The Board recognizes its faculty as subject matter experts in their areas of teaching and research and encourages them to responsibly disseminate their research and knowledge. Except as provided in the sections below titled "Official Legislative Advocacy" and "Authority to Make Institutional Statements," this policy does not restrict any UMS faculty, staff, or student from speaking on political matters, including testifying before or speaking with legislators or policy makers, about the subjects of their teaching or research expertise or personal experience, provided they do not represent that they speak for their campus or the System unless authorized to do so.

#### Official Legislative Advocacy

The UMS Charter authorizes and directs the UMS Chancellor to develop and implement an effective statewide legislative program for the System. All official statewide legislative advocacy will therefore be managed through the Chancellor's office, specifically the Office of Community and Government Relations. System legislative advocacy may only be pursued by individuals registered with the State of Maine for that purpose or in coordination with the Office of Community and Government Relations. University-specific legislative meetings and advocacy will also be coordinated with the Office of Community and Government Relations.

Individual employees below the campus president level who are not working in coordination with the Office of Community and Government Relations may nevertheless express individual views on legislative or political matters, subject to Board Policy 212 generally and provided, when doing so, he or she indicates that the views expressed are his or her own personal opinions and that he or she is not authorized to speak for his or her campus or the System.

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For the purposes of this policy, "statewide legislative advocacy" includes interaction with the State Legislature, including individual legislators or legislative committees and their staff, the Governor's office and staff, or any other public official or the general public when the purpose of the interaction or communication is to advocate for a specific position or outcome affecting the System or any of its campuses on pending legislation or citizen initiatives/public questions, proposed regulations, bond referendums, and the like.

Interactions with the United States government's Executive Branch and agencies, Congress and congressional staff, and the various federal regulatory bodies having legal jurisdiction over each System university's operation and activities are subject to this policy as well, except in cases where a specific campus or System office has primary responsibility for a function closely tied to the functional responsibility of the governmental office at issue (e.g., Department of Education Title IV officials and campus financial aid offices; Department of Education Office of Civil Rights and System General Counsel, etc.). Further, this policy does not restrict any UMS faculty, employee, department, division, or office from providing information, research, survey data, or policy advice to a local, state, or federal government official or office when required to do so by grant, contract, or legal mandate (e.g., the University of Maine Center for Community Inclusion and Disability Studies (CCIDS), which, by federal law, is required to advise, educate, and disseminate information to state and federal policymakers about individuals with developmental disabilities, or any similarly-purposed office or activities).

#### Restrictions on Partisan Political Activity-Generally

For the purposes of this section, "partisan political activity" means any action taken with the purpose or effect of supporting or opposing any candidate or political party's candidates for elective office at the local, state, or federal level.

Except as authorized in the section above titled "Official Legislative Advocacy":

- No System or university employee may engage in <u>partisan</u> political activity on his or her work
  time; while acting in his or her official capacity; in or on <u>UMS property</u>, or with the use of other
  UMS or university <u>funds or</u> resources, such as staff time, UMS or university office space and
  facilities or campus/System mail, UMS or university office equipment or networks such as
  computers, copiers, email, UMS- or university-issued cell phones and other communications
  equipment, UMS or university websites and links to them, or UMS or university office supplies
  such as official stationery or letterhead.
- No System or university records, organizational information, mailing lists, conference
  attendance lists, and directories of any kind may be used for partisan political purposesactivities,
  and no System or university's name, symbols, and logos may be used for partisan political
  purposesactivities.
- No System or university employee may use university classes or any institutionally sponsored program or activity to endorse or oppose specific candidates, political parties, or political programs engage in partisan political activity or for the purpose of advance imposing his or her own individual political views on students or other employees. This provision will not be construed to restrict legitimate exercises of academic freedom, pursued for legitimate curricular or pedagogical purposes, as provided in Board Policy 212, and permits, for example, pedagogically sound education, faculty-led classroom discussion, critical thinking, research, and

- class assignments related to the political process and public policy choices and their impacts on history and contemporary society.
- No System or university funds may be expended to support or oppose any partisan political
  candidate or position or lobby for or against legislation or political questions or issues generally.
  This provision applies individually to Presidents and the Chancellor as well, whose individual
  actions are presumed to be attributed to the university/System.

#### **Employees Seeking Elective Office**

See Board Policy 403 (<a href="http://www.maine.edu/about-the-system/board-of-trustees/policy-manual/section403/">http://www.maine.edu/about-the-system/board-of-trustees/policy-manual/section403/</a>)

#### **Chancellor and Presidential** Authority to Make Institutional Statements

The This section applies only to the UMS Chancellor and System University Presidents, who:

- Have authority to speak or issue statements, or designate official spokespersons to speak or
   issue statements, on behalf of their institutions on issues core to the System/university mission
   (green);
- Should review in advance with the rapid response advisory team described below, when time
  permits, issues related to but not directly mission central (yellow); and
- Are not authorized to speak, including through official spokespersons, on issues beyond or only
  tangentially related to core institutional mission (red).

Issues are not static in relevance, but may vary in public or political salience over time. Issues may shift from one concentric circle to another, or overlap, depending on context.

Issues that involve legislative matters or advocacy must be coordinated as provided in "Official Legislative Advocacy" above.

A standing rapid response advisory committee of six members, including two Trustees, two Presidents, and two senior UMS staff (one of whom should be the System General Counsel or his/her legal designee) should be available to review, when time permits, the reasonableness of making statements on issues brought forth by the Chancellor/Presidents that appear to fall in the yellow zone.

**GREEN/Mission Critical:** Academic administration, curriculum, institutional finances and planning, health and safety of students and employees, and general issues critical to the financial or functional stability and wellbeing of the institution and its students, e.g., Pell grant funding, guns on campus, defunding TRIO programs, marijuana dispensaries near campus.

YELLOW/Mission Indirectly Related: Issues important or relevant to society at large that may impact an institution or its students or employees, but not in such a way as to undermine the institution's educational mission or prevent the institution from carrying it out, e.g., climate change, labor standards, immigration policy.

**RED/Mission Unrelated:** Issues of local, state or national import, but not relevant to educational mission or institutional financial or functional stability, e.g., abortion policy, tax reform, global trade policy.

The Board retains the right at all times to issue statements, including through the Chair or Chancellor, on behalf of the University of Maine System that cover all System universities.

#### Discussed:

BOT Drafting Task Force 5/2/17, 8/7/17, 10/17/17

Presidents' Council (earlier 2/8/17, 4/12/17, 5/10/17, 6/14/17 (update only), 7/14/17 (update only), 8/9/17 (update only), 9/13/17, 10/11/17, 11/8/17, 12/12/17, 1/10/18

UMS BOT Student Reps 11/20/17

UMS BOT Faculty Reps 11/19/17 (and via email through December 2017 to present)

UMaine Faculty Senate Executive Board 1/12/18

USM Faculty Senate 2/2/18 (scheduled)

UMA Faculty Senate 2/16/18 (scheduled)

# University of Maine System Board Policies Related to Appointments and Benefits of Presidents/Chancellor

## **HUMAN RESOURCES AND LABOR RELATIONS Section 404.4 Chancellor and Presidents Benefit Package**

Effective: 12/18/79

Last Revised: 11/6/95, 3/15/10, \_\_/\_\_/18
Responsible Office: Human Resources

#### **Policy Statement:**

The Chancellor and Presidents are appointed by and serve at the pleasure of the Board of Trustees. Appointments for the Chancellor or a President will specify (1) the process and timetable for evaluation, and, subject to the Notice for Cause policy, (2) a two to three - year renewable term appointment which that may, for satisfactorily meeting evaluation outcomes, be extended by one year effective one year before expiration of the term annually on the first anniversary date of appointment and annually thereafter, resulting in a two-year rolling term. subject to the Notice for Cause policy

In addition to benefits accorded all System employees, the Chancellor and Presidents shall be eligible for the following benefits established by the Board of Trustees and as agreed upon at the time of appointment or reappointment.

- 1. Life insurance at twice the base salary with the University System paying the total premium. This is in addition to any life insurance provided all full-time regular employees.
- 2. A motor vehicle <u>allowance</u>. <u>No further mileage reimbursement is available when a vehicle</u> allowance is provided.
- 3. As a condition of employment, University-maintained housing may will be provided on a campus when available or a housing allowance may will be provided for the appointed Chancellor and President (excludes Interim or Acting incumbents). Housing allowances provided in lieu of University housing will be reviewed annually and adjusted by the housing C.P.I. periodically and adjusted as deemed appropriate.
- 4. <u>Other benefits and terms of appointment may be negotiated on an individual basis and approved by the Board of Trustees.</u>

A Chancellor or President who completed five or more years of service in that position and who will continue to serve UMS in a faculty position may be granted a one semester or one-half year sabbatical at the administrative salary level in order to transition to the faculty position. The sabbatical is not a right, but may be granted at the discretion of the Chancellor for a President or of the Board for an employee serving as Chancellor. The employee will be required to return to UMS employment for a least one year or to repay the sabbatical salary.

- 5. Dependent Tuition Waiver Benefit within the University of Maine System.
- 6. Deferred and/or incentive compensation.

#### Procedures:

The Board of Trustees shall approve the salaries of the individual officers upon appointment and thereafter on a periodic basis.

12/22/17

# University of Maine System Board Policies Related to Appointments and Benefits of Presidents/Chancellor

## **HUMAN RESOURCES AND LABOR RELATIONS Section 404.5 Appointment – System Professor, Researcher or Administrator**

Effective: 11/18/85

Last Revised: 3/15/10, \_\_/\_\_/18
Responsible Office: Human Resources

#### **Policy Statement:**

Appointment as a University of Maine System Professor, Researcher or Administrator allows the University of Maine System and the State of Maine to continue to benefit from the individual's professional expertise and experience in teaching, conducting research or leadership projects in various areas.

Individuals with a minimum of three years of service as a Chancellor or President in the University of Maine System are eligible to pursue an appointment as a University of Maine System Professor, Researcher or Administrator.

A University of Maine System Professor, Researcher or Administrator's appointment, specific duties, and responsibilities shall be determined on an individual basis by the Board in consultation with the individual involved. When the duties involve a specific university assignment, the President and the appropriate unit of that institution shall also be consulted by the Board of Trustees.

Appointment as a University of Maine System Professor, Research or Administrator is not a right and is granted by the Board of Trustees in their discretion. A President or Chancellor who holds previously granted faculty rank or tenure and who has the right to assume a faculty position is not eligible for appointment as University of Maine System Professor, Researcher or Administrator.

Conditions of Appointment

The salary and other terms and conditions of employment of a University of Maine System Professor, Researcher or Administrator shall be established by the Board.

#### Procedures:

- 1. The salary shall be computed at a rate of 66.6% of the individual's salary at the time of appointment. This amount is for a fiscal year appointment and will be adjusted for an academic year or other work year. The salary and support budget shall be provided on an on-going basis from a separate System account as approved by the Board of Trustees.
- 2. Following appointment as a University of Maine System Professor, Researcher or Administrator the individual shall be eligible for salary increases as determined periodically by the Board of Trustees.

3. After completion of three or more years of satisfactory service as president or chancellor, an individual shall be eligible to request a non-renewable one-year appointment as University of Maine System Professor, Researcher or Administrator at a fiscal-year salary equal to 66.6% of the last annual salary as president or chancellor.

After completion of five or more years of satisfactory service as president or chancellor, an individual shall be eligible to request a non-renewable two-year appointment as University of Maine System Professor, Researcher or Administrator at a fiscal year salary equal to 66.6% of the last annual salary as president or chancellor.

After completion of seven or more years of satisfactory service as president or chancellor, an individual shall be eligible to request a non-renewable three year appointment as University of Maine System Professor, Researcher or Administrator at a fiscal year salary equal to 66.6% of the last annual salary as president or chancellor.

Appointment as University of Maine System Professor, Researcher, or Administrator is subject to approval of the Board of Trustees and will be in accordance with the provisions of Board policy 404.5. Board policy 404.5 may be amended by the Board. Terms of employment not addressed in Board policy 404.5 shall be in accordance with provisions of the Handbook. Any sabbatical granted following completion of service as President or Chancellor shall be included in the appointment term as University of Maine System Professor, Researcher, or Administrator.

- 4. The appointee shall be subject to the same review process as individuals in equivalent positions and is subject to discontinuation for cause or for financial and program reasons.
- 5. A University of Maine System Professor, Researcher or Administrator holding a university or system-wide appointment may have assigned to him or her such graduate and undergraduate research assistants and/or secretarial assistance as agreed upon in the terms of the appointment and shall be provided a suitable office, appropriately furnished.

12/22/17



Office of the Chancellor 15 Estabrooke Drive Orono, ME 04469 9 January 2018

Tel: 207-973-3205 www.maine.edu Frederick A. Servello, Dean and Director College of Natural Sciences, Forestry,

and Agriculture University of Maine 5782 Winslow Hall

The University of Maine

Orono, ME 04469

University of Maine at Augusta

Dear Dean Servello:

University of Maine at Farmington

Thank you for your letter of 3 January regarding the appointment of my representative to the UMaine Board of Agriculture.

University of Maine at Fort Kent

It is with pleasure that I endorse your recommendation for the reappointment of Representative Donald Marean to that Board. Please convey my appreciation to

University of Maine at Machias

Representative Marean for his willingness to continue to serve.

University of Maine at Presque Isle

At their January 29<sup>th</sup> meeting, the UMS Board of Trustees will take up the presented recommendation for appointment to the UMaine Board of Agriculture for a five-year term. The information you provided has been forwarded to the Clerk's office for inclusion on the agenda.

University of Southern Maine

Should you need further assistance with this, please don't hesitate to let me know.

Best wishes.

James H. Page, Ph.D.

Chancellor

cc: Susan Hunter, UM President

Jeffrey Hecker, UM Executive Vice President for Academic Affairs and Provost John Rebar, UM Cooperative Extension Executive Director

Jessica Leahy, UM Interim Associate Dean

John Dieffenbacher-Krall, UM Assistant Director of Research & Clerk to the Board of Agriculture

#### Office of the Dean and Director

College of Natural Sciences, Forestry, and Agriculture Maine Agricultural and Forest Experiment Station



5782 Winslow Hall Orono, Maine 04469-5782 Tel: 207-581-3202 Fax: 207-581-3207 www.umaine.edu

January 3, 2018

James H. Page, Chancellor University of Maine System 267 Estabrooke Hall Orono, ME 04469



Dear Chancellor Page:

As you know, the Maine Legislature created the Board of Agriculture to advise the chancellor of the University of Maine System and president of the University of Maine on research and extension education needs related to Maine agriculture. The legislation (see attached) forming the Board of Agriculture stipulates that members of the Board serve five-year terms, and the members have to be reappointed or replaced at the end of their terms.

The legislation also stipulates that the chancellor makes one appointment to the board. That seat is currently held by Representative Donald Marean who has served a number of terms as the chancellor's appointee to the board. His current term ends February 27, 2018. We are requesting that you reappoint Rep. Marean. He is serving his fifth term in the Maine House of Representatives. During his legislative service, he has served four terms on the Agriculture, Conservation, and Forestry Committee. He is active in the Standard Bred equine industry in the state and is very knowledgeable about the industry. Appointing a representative from the equine industry also adds diversity to the board, as the equine industry is not among the agricultural groups formally designated to have representation. Rep. Marean has agreed to continue to serve on the Board of Agriculture, subject to your approval. A brief bio-sketch prepared by Rep. Marean is enclosed for your information.

Thank you for your consideration of this appointment. We look forward to receiving notification from your office when the appointment process has been completed. When we receive that notification we will notify your nominee. If you have any questions, please do not hesitate to contact me.

Best regards,

Frederick A. Servello

Dean and Director

Attachments (2)

C: President Susan Hunter

Executive Vice President for Academic Affairs & Provost Jeffrey Hecker Executive Director John Rebar Interim Associate Dean Jessica Leahy Assistant Director of Research & Clerk to the Board of Agriculture

John Dieffenbacher-Krall

Rep. Donald Marean

inter a Same

MAINE'S LAND GRANT AND SEA GRANT UNIVERSITY

A Member of the University of Maine System

#### Donald G. Marean 233 Bonny Eagle Road Hollis, Maine 04042

Lifelong Maine resident.
Resident Town of Hollis 30 Years.
Small Business owner for 40 Years.
Lindon Farm owner and operator 30 Years.
Married 58 Years with three children, three grandchildren, and three great grandchildren.

#### -COMMUNITY SERVICE-

Served in the 122nd, 123rd, 126th, 127th Legislatures. Currently in 128th Legislature. Joint Standing Committee on Agriculture, Conservation, & Forestry Committee - 4 terms Governor Baldacci's Task Forces on State-owned Land & Natural Resources.

Director and President of
Maine Standardbred Breeders and Owners Association
Board of Agriculture University of Maine Orono.
Board of Maine Farm Bureau Horse Council
Board of Corporators Gorham Savings Bank
Chairman Land for Maine's Future Board
Town of Hollis Selectman
Director of United States Trotting Association New England Chair.

Director of United States Trotting Association New England Chair Executive Board and Finance Committee of United States Trotting Association

#### - BUSINESS EXPERIENCE -

40 Years Retail Management.
Small Business Owner.
Opened Standish Hardware 1973 – 2003.
Founded Lindon Farm in Hollis in 1988.
(Commercial Breeding Horses and Racing Stable)
Current Member and Past Master of Standish Masonic Lodge.

## 7 §125. BOARD OF AGRICULTURE

## 7 §125. BOARD OF AGRICULTURE

1. Establishment; duties. The Board of Agriculture, referred to in this section as the "board," as established in Title 5, section 12004-G, subsection 4-A, is created within the University of Maine System. The board shall advise the Chancellor of the University of Maine System and the President of the University of Maine at Orono on matters concerning the operation and management of agricultural research conducted by the Maine Agricultural Experiment Station and university farm-based programs, including those of the University of Maine Cooperative Extension Service. The board's duties are limited to advising the chancellor and the president on research and programs relating to agriculture. The board does not advise the Director of the Maine Agricultural Experiment Station or have a role in the operation of research and programs within the Maine Agricultural Experiment Station that relate to forestry, wildlife, or fisheries and aquaculture. The board shall assist the chancellor and the president in articulating the mission of the Maine Agricultural Experiment Station as it pertains to agriculture. The director, with the agreement of the board, shall develop a budget for the station. The board and the director shall seek agreement on all issues. In the event that agreement can not be reached, final authority rests with the director. The board may not interfere with funding and grants for commodity research programs brought to the University of Maine System directly or through the efforts of commodity groups. The board shall respect the expertise of the various commodity groups and shall maintain the integrity of the research being recommended and reviewed by specific commodity groups. The board shall assist in the coordination of activities with commodity groups interested in or supporting agricultural research. The board shall consult with the following agricultural commodity advisory committees on agricultural research and extension priorities:

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A. The University of Maine System Wild Blueberry Advisory Committee; and [1997, c. 711,
§5 (NEW).]
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B. The Maine Potato Board Research and Product Development Committee. [1997, c. 711, §5

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[ 1997, c. 711, §5 (NEW) .]
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- 2. Membership. The board consists of the following 20 members:
- A. A designee of the President of the University of Maine at Orono; [1997, c. 711, §5
- B. A designee of the Chancellor of the University of Maine System; [1997, c. 711, §5 (NEW).]
- C. The Commissioner of Agriculture, Food and Rural Resources or the commissioner's designee; [1997, c. 711, §5 (NEW).]
- D. The president of a statewide farm bureau or the president's designee; [2009, c. 393, §1
- E. The president of a statewide agricultural council or the president's designee; [2009, c. 393, \$1 (AMD).]
- F. Eight members representing the agricultural industry, one person designated by each of the following:
  - (1) The Maine Potato Board;
  - (2) The Wild Blueberry Commission of Maine;
  - (3) A statewide pomological society;
  - (4) A statewide vegetable and small fruit growers association;
  - (5) A statewide dairy industry association;
  - (6) A statewide landscape and nursery association;



Maine Economic Improvement Fund

Annual Report FY17 January 2018

A successful partnership among Maine's government, private sector and public universities to build Maine's economy and future workforce through research and development.

Presented to Maine State Legislature

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The Maine Economic Improvement Fund (MEIF) represents Maine's ongoing commitment between the state and our public universities, working together to advance research and economic development for the benefit of all Maine people. In July 2014, the University of Maine System Board of Trustees (UMS BOT) established Strategic Outcomes and metrics to measure the performance of the University of Maine System and its campuses. Included in these Strategic Outcomes are specific goals for research, economic development and workforce development. UMS BOT has applied these overall Strategic Outcomes to research and development, and has established specific goals and metrics for the Maine Economic Improvement Fund to help achieve these Strategic Outcomes. These metrics were approved at the end of FY14, and are applied to all FY17 MEIF activity and included in this annual report. By statute, MEIF-funded activity is restricted to Maine's seven statutorily established R&D sectors.

In FY17, the state's \$17.35 million MEIF investment was leveraged at a rate of 3.4:1 by our UMS campuses for an additional \$58.6 million in federal and private-sector grants and contracts in the seven sectors.

- MEIF funds and the external grants and contracts it leverages funded the work of 497 researchers and technicians, and 960 graduate and undergraduate students.
- These grants and contracts provided more than \$2 million to purchase major equipment to upgrade and outfit university labs.
- Maine's public universities secured new patents, worked on development projects with large and small businesses and start-ups, and provided R&D support to over 500 hundred companies and individuals.

As required in the statute that created MEIF 20 years ago, included with this FY17 MEIF report are financial and informational details.

If you have any questions about MEIF projects, this report or other University of Maine System research and economic development programs, please contact me.

Sincerely,

James H. Page Chancellor

James Hlas

The Maine Economic Improvement Fund Fiscal Year 2017

#### **Background of the Maine Economic Improvement Fund**

The Maine Economic Improvement Fund (MEIF) represents the ongoing commitment between the state, the private sector and our public universities, working together to advance research and economic development for the benefit of all Maine people.

Since the Maine Legislature established MEIF in 1997, MEIF has positioned the University of Maine System (UMS) at the center of statewide efforts to leverage economic development through targeted investment in university-based R&D. MEIF continues to be funded through an annual state appropriation to UMS.

These funds provided through state appropriation to the University of Maine System are dollars specifically provided to support university-based research, development and commercialization in the state's legislatively designated seven strategic technology areas:

- Advanced Technologies for Forestry and Agriculture
- Aquaculture and Marine Sciences
- Biotechnology
- Composites and Advanced Materials Technologies
- Environmental Technologies
- Information Technologies
- Precision Manufacturing

The University of Maine and the University of Southern Maine have well-established research, development and commercialization activities accounting for 97 percent of the MEIF activity. In 2009, the University of Maine System established the Small Campus Initiative Fund to promote seven-sector research and development activity at the other five UMS campuses and, as of 2013, Maine Maritime Academy (MMA).

#### **Role of MEIF**

The role of MEIF is to provide researchers at Maine's public universities with the investment necessary to:

- Attain external grants and contract to support R&D activities in Maine's seven sectors.
- Attract and retain world-class researchers.
- Provide support for modern laboratories and state-of-the-art equipment.
- Create new products, patents, technologies, companies and exciting job opportunities in Maine.
- Create and sustain economic development and innovation.

MEIF funds often provide the required match to acquire these federal or private sector grants, and this investment in Maine's public university R&D helps faculty and students successfully leverage tens of millions of dollars in grants and contracts annually.

MEIF money also supports equipment purchases or facilities renovations to make the universities more competitive for federal grants.

MEIF increasingly fosters university partnerships with business and industry through economic development collaborations, entrepreneur training programs, business incubators, business research and other programs. These efforts lead to new Maine-based products, technologies, patents and spin-off businesses.

The University of Maine and the University of Southern Maine are the two universities with established research and graduate programs in all of the seven targeted research sectors and have received MEIF funds, with 76.4 percent to the University of Maine, 19.1 percent to the University of Southern Maine, 1.4% to the University of Maine Machias and 3 percent to the other campuses and Maine Maritime Academy.

Indicators of success show that Maine's MEIF investment is paying dividends by:

- Creating businesses and jobs, including the jobs of more than 400 faculty and staff, and over 800 students working on MEIF-funded projects
- Boosting Maine's economy by leveraging MEIF funds to bring federal and private-sector grants and contracts to Maine.
- Building capacity and expertise to help Maine companies solve problems and commercialize innovation.
- Helping commercialize patents, innovations and intellectual property.
- Capitalizing on natural resources and core strengths by focusing R&D efforts on economic sectors
  where Maine can make real gains. University research personnel use MEIF resources to support
  the staff, equipment and facilities they need to successfully pursue and develop research projects.

#### Strategic Outcomes, Goals and Metrics

In July 2014, UMS BOT developed and approved Strategic Outcomes to measure the performance of the University of Maine System and its campuses. In October 2014, UMS BOT approved the use these newly developed Strategic Outcomes to create MEIF specific goals and metrics. Several of the UMS Strategic Outcomes are performance targets for all R&D and economic development activity. The MEIF goals recognize that MEIF activity is restricted to Maine's legislatively selected seven R&D sectors and are, therefore, MEIF goals and metrics, and a subset of the overall UMS goals. The UMS Strategic Outcomes that apply to R&D activity are:

Target 1 – Increase Research Capacity and Activity

Target 2 – Support New Technologies, Licensing and Commercialization

Target 4 – Increase Economic Development Partnerships

Overall Goal - Support R&D Workforce Development

This report addresses those goals. In addition, the University of Maine System reports R&D outcomes annually through the statutorily required survey of Maine R&D activity administered by the Maine Department of Economic and Community Development.

#### The R&D Strategic Outcomes and related MEIF goals are:

MEIF Target 1 (derived from UMS BOT Research and Economic Development Target 1) — UMS maintains a sponsored programs grant and contracts effort growing greater than 3 percent annually on a three-year rolling average from a 2013 baseline of \$45 million and NSF-defined total research expenditures of \$45 million in the MEIF sectors. Activity from the seven MEIF sectors will account for 50 percent of the total R&D grants and contracts, with a 3 percent annual growth on a three-year rolling average. The FY13 baseline was a calculated percentage of total activity. Table 1 below shows the actual FY13 baseline at slightly less at \$43.5 million.

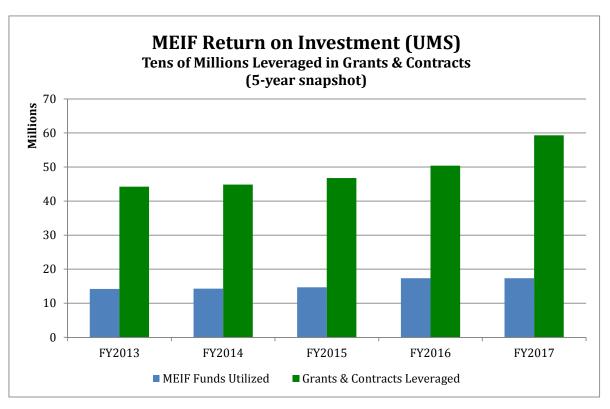
Table 1

FY17 Total Grants and Contracts	Number of Awards	Total Award Value
Total proposals submitted	1360	\$222,596,721
Total proposals awarded	1080	\$81,982,987

Grants and Contracts Awarded in MEIF Sectors	FY2013 MEIF Awards	FY2014 MEIF Awards	FY2015 MEIF Awards	FY2016 MEIF Awards	FY2017 MEIF Awards
Aquaculture and Marine	7,045,322	9,153,389	15,187,566	12,631,690	21,229,069
Biotechnology	1,985,295	6,353,450	1,524,204	2,399,487	3,821,390
Composites	9,230,715	5,135,033	5,247,712	6,974,264	13,504,642
Cross Sector	2,990,129	4,681,209	1,018,132	507,842	4,274,394
Environmental Technologies	5,781,658	7,959,264	4,349,651	5,045,536	5,543,121
Forestry and Agriculture	8,642,424	7,654,060	14,194,009	10,317,799	4,660,014
Information Tech	7,422,675	2,520,521	4,473,781	11,497,199	5,292,726
Precision Manufacturing	1,130,746	1,414,700	780,694	1,009,921	1,602,646
-	\$44,228,964	\$44.871.626	\$46,775,749	\$50,383,738	\$59,334,874

17.7% growth from FY16 to FY17

Figure 1



In summary, the MEIF Target 1 for increasing external grants and contracts leveraged through MEIF investments saw an increase of 16.4 percent over the previous fiscal year. This favorable trend continues in a positive direction after decreases from FY10 through FY12. This is largely related to changes in the economy and the federal and private sectors partners that are beginning to slowly increase post-recession funding for R&D. Recognizing the lead-time for proposal preparation, sponsor review and selection, and contract activity to begin, there can be a one- to two-year lag in output. Proposal preparation and submissions remain steady. For the purpose of this report, a private-sector contract is counted as a single proposal submission.

**MEIF Target 2** (derived from UMS BOT Research and Economic Development Target 2) – UMS annual revenue from commercialization including intellectual property licensing increases at least 20 percent annually on a three-year rolling average from a baseline of \$150,000 from the MEIF sectors.

Table 2

MEIF Target 2 - Commercialization Activity	FY13	FY14	FY15	FY16	FY17
Revenue from Commercialization	\$121,250	\$96,726	\$150,094	\$127,949	\$186,148
Number of Patents Filed	15	32	22	35	12
Number of Patents Issued	16	12	9	8	6
Number of License Agreements & License Options	6	6	16	16	7

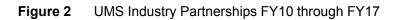
In summary, revenue from the commercialization of intellectual property has decreased over the last several years but continues in an upward trend FY2017. Commercialization in Maine often relies on companies licensing UMS intellectual property to secure private investment to advance technology, products and services into markets. General trends in venture capital and private equity investments are slowly rebounding in Maine and companies are starting to see new equity investments. Patents take four to five years from application to issuance. Newly issued UMS patents reported above and detailed in Appendix 1 were filed four to five years ago. In addition, UMS technologies generally fall into categories, such as transportation infrastructure, pulp and paper, sensors and biotechnology. These sectors have been slower to rebound post-recession and timelines from lab to market can take five to 10 years. UMS is focusing additional effort to accelerate the commercialization with private-sector partners and other investment programs, such as the Maine Technology Institute and Maine Venture Fund.

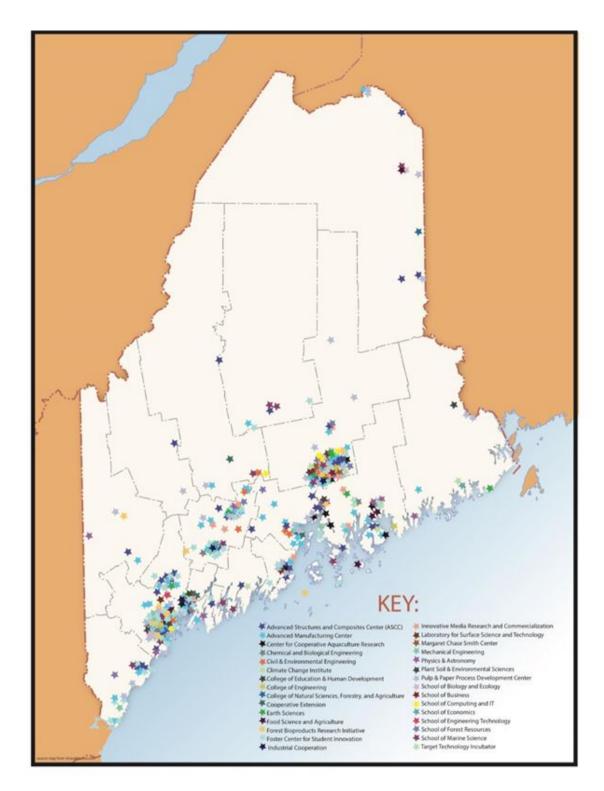
**MEIF Target 3** - (derived from UMS Research and Economic Development Target 4) – The UMS annual revenue from activities with business and industrial partners in the MEIF sectors increases from an FY13 baseline of \$3.15 million to \$6.75 million by FY17, and the number of business and industry contracts in the MEIF sectors will increase from a baseline of 400 in FY13 to 450 in FY17.

Table 3

MEIF Target 3 - Business & Industry Contracts	FY2013	FY2014	FY2015	FY2016	FY2017
Revenue from Business & Industrial Contracts	\$4,156,184	\$4,371,999	\$5,759,572	\$4,836,138	\$5,035,394
Number of Business & Industrial Contracts	407	500	624	519	565

In summary, many MEIF investments not only leverage external grants and contracts, but through a combination of MEIF funds, and grant and contract funds, have helped UMS campuses build capacity to work directly with industry partners. Some industry partners will be companies licensing and commercializing UMS intellectual property, while many companies are working with UMS campuses to get assistance with solving their problems or perfecting their inventions and innovations. UMS projects with business and industry continue to grow, and activity is meeting the goals and metrics of this Target. Figure 2 demonstrates the statewide nature of these partnerships for those contracts that are currently tracked. Many additional companies, inventors and entrepreneurs receive advice and guidance, but do not result in formal contracts.





**MEIF Target 4** - Support R&D Workforce Development – UMS shall maintain a concerted effort to involve faculty, staff and students participating in research, development and commercialization, and shall report annually the number of employees directly supported by MEIF funds and by grants and contracts in the MEIF sectors. As external funding is hard to predict, there is no specific numerical goal for employee count, but UMS shall report the annual number of faculty, staff and students to indicate trends and identify opportunities for growth.

Table 4

MEIF Target 4 – Workforce Development	Wages paid from MEIF	Wages paid from Grant/Contract	Totals
Number of faculty staff supported (FTE = Full Time Equivalent)	186	311	497
Number of Graduate students supported (headcount)	24	317	341
Number of Undergraduate students supported (headcount)	145	474	619

Student costs from grants and contracts	FY2014	FY2015	FY2016	FY2017
Student salaries and wages from grants and contracts	\$4,877,650	\$4,603,696	\$5,255,861	\$5,498,777
Student tuition paid by grants and contracts	857,781	835,961	956,963	935,494
Student fellowships paid by grants and contracts	199,400	552,944	197,744	233,111
Student health insurance paid by grants and contracts	282,848	62,967	247,960	214,951
Total soft money student support	\$6,217,679	\$6,055,568	\$6,658,528	\$6,882,333

In summary, state economic analysis predicts economic growth in Maine based on an available trained and educated workforce. Growth in the seven MEIF sectors is especially dependent on the available workforce. MEIF seven-sector projects at UMS rely on regular faculty and staff, as well as many "soft money" employees — those hired to work on specific grants and contracts, and paid by those grant and contract funds. UMS employees and students gain valuable on-the-job training and experience, and may then contribute to the employment base within these sectors after completion of the grants or graduation. Grant and contract revenue is a strong contribution to this workforce development. UMS counts employees involved in this activity, and will continue to pursue the growth in employment numbers related to growth in grant and contract activity. Nonstudent employees are tracked as full-time equivalents (FTEs) based on a 40-hour/52-week work year. Student employees, tracked by head count, generally work less than 20 hours per week during the academic year.

Grant and contract revenue also is an important source of funding for students' salary, tuition and other types of support, allowing many research-active students to offset their cost of education while getting valuable skills and on-the-job experience.

#### Success and Strategic Impact

By leveraging MEIF funds, UMS has attracted more than \$283 million since 2012 in federal and privatesector grants and contracts related to the seven strategic research areas. This funding directly results in Maine products and technologies, such as biofuels, pulp and paper products, new potato varieties, aquaculture technologies and software, which lead to improvements in Maine's industries.

#### Return on Investment

Each year, the state's MEIF appropriation is matched by tens of millions of dollars in federal and private funds for important research & development. The University of Maine as the state's land grant institution utilizes its long-established research capacity and infrastructure to attract the majority of these matching funds. Other UMS schools continue to build and partner within federal and private-sector grants and contracts.

#### **Developing Workforce and Creating Jobs**

497 full-time equivalent jobs are funded annually in Maine through the funds leveraged and expended related to MEIF. These positions include faculty, technicians and research staff. 960 graduate and undergraduate students are funded for their involvement in research, development and commercialization. This activity is better than most internships and gives students great real-world experience as well as life-long networks and connections.

#### **MEIF Success Stories**

#### Alliance for Maine's Marine Economy

The Alliance is focused on marketing and coordinating existing capacity to support Maine's marine sector including aquaculture, commercial fisheries and value-added processing while building new capacity for workforce development, innovation and business development. Comprised of more than 20 marine research programs and created with a \$7 million award from Maine's Marine Economy and Jobs Bond, the Alliance for Maine's Marine Economy brings together key stakeholders from Maine's colleges and universities, aquaculture and community-based organizations, non-profit research institutions, and private sector Maine businesses. This statewide/sector-wide Alliance includes the following partners:

- Private Companies: Cape Seafood, Cooke Aquaculture, and Maine Fair Trade Lobster
- Trade Associations: Maine Aquaculture Innovation Center, Maine Aquaculture Association, Maine Lobster Dealers' Association, Maine Lobstermen's Association, and the Downeast Lobstermen's Association
- Non-profit organizations: Downeast Institute for Applied Marine Research & Education, the Gulf
  of Maine Research Institute, Bigelow Laboratory for Ocean Sciences, Coastal Enterprises, Inc.,
  the Island Institute, and the Penobscot East Resource Center
- Universities: University of Maine System including UMaine entities: Darling Marine Center, Maine Sea Grant, the School of Marine Sciences, the Aquaculture Research Institute, the Center for Cooperative Aquaculture Research, Cooperative Extension, the School of Food and Agriculture, the Lobster Institute & the Office of Innovation and Economic Development and the University of Maine, Machias

The Alliance is actively engaging with other companies, universities/colleges and non-profits to continue to build strategic alliance to grow Maine's marine economy.

The effort builds on the extensive public and private resources and assets available to support Maine's Marine sector including aquaculture, commercial fisheries and value-added seafood processing. The Alliance is charged with marketing and coordinating the capacity and capabilities while pursuing additional investment to grow this sector. The goal of this new Alliance is, "to ensure that Maine seafood, fishing and aquaculture industries and the natural and innovation ecosystems on which they depend are healthy and benefit Maine people.

#### University of Maine Machias partnership with the Downeast Institute

UMM has been the recipient of numerous grants through the MEIF Small Campus Initiative (MEIF-SCI) since its inception in 2009. All grants have involved applied marine research in the aquaculture sector on soft-shell clams, blue mussels, and Arctic surf clams. The work has taken place at UMM's Marine Science Field Station (MSFS) at the Downeast Institute on Great Wass Island in the town of Beals. Applied marine research has gone hand-in-hand with a quest to create a marine research laboratory that would be used by scientists, their students and staff wishing to conduct work in a pristine, coldwater environment.

During the past two years, MEIF-SCI funds have been used to equip the Field Station for the expansion that is now underway and approximately 40% completed. Monies provided through the MEIF-SCI program have enhanced our ability to leverage funds for the new infrastructure program from both public and private sectors, and given donors confidence that our efforts are scientifically legitimate and beneficial to Maine's coastal communities.

In FY17, UMM and the Downeast Institute leveraged MEIF and competitively awarded State of Maine Marine Bond funds to secure an additional \$3.8 million in private foundation funding and have now begun construction on the \$5.8 million expansion of the Downeast Institute/UM Machias Marine Field Station.

#### **SEA Fellows**

Through the SEA (Science for Economic Impact and Application) Fellows program, undergraduate students are selected to conduct research designed to benefit Maine's marine economy and the coastal communities that support it.

Co-developed by the University of Maine and the University of Maine at Machias to stimulate university-industry partnerships in the marine economy, this program exposes undergraduate participants to engagement training and the most important marine related research topics. Students work not only with academic researches, but professionals in the marine industry, on a variety of meaningful topics from the best ways to catch fish bound for aquaculture to introducing innovative farming methods for kelp.

#### **Maine EPSCoR: SEANET**

Through Maine EPSCoR, the statewide, multi-institutional SEANET project was developed to examine the social, economic, and environmental aquaculture systems of Maine's vast coastline. Created by a five-year, \$20 million grant from the National Science Foundation, the project seeks to create an aquaculture research network that will assist in feeding a growing population by generating employment opportunities and economic development.

The research done within this project engages a variety of constituents around the state as it strives to train a modern STEM workforce and increase public scientific literacy. To build the workforce, there are more than 4,000 workforce development opportunities and 100 students are being hired across the state's educational institutions.

By comparing three regions – the south, the midcoast, and the downeast – the project is able to examine the diversity of Maine's coast and use this research to offer solutions to aquaculture problems faced around the world.

#### Boosting the rural economy: expanding production of honey and maple syrup

This three-year project, funded by a USDA award of \$498,462, is being led by UMaine's Dr. Jessica Leahy. This award will allow for the examination of the challenges and opportunities faced by the producers of honey and maple syrup in Maine. Once they understand the challenges, researchers will then be able to identify the opportunities for sustainable expansion.

For rural communities, the future of their economy is at the forefront of their minds. Understanding where best to invest efforts and funds will be integral to their long term economic sustainability.

Though this program, a number of undergraduate students from both UMaine and the College of the Atlantic will be given opportunities to do research as part of the Sustainable Food Systems Research Collaborative (SFSRC) and then present their findings at various events across the state. The goal is to create a strong network linking maple syrup and honey producers with economic development professionals, researchers, policy makers, and community members.

#### Citizen Science and Monitoring Maine's Lakes

Maine lakes play a vital role in the state in terms of the economic, social, recreational, and aesthetic benefits they provide, in addition to their approximately \$4 billion annual economic contribution. Unfortunately, many of Maine's lakes have experienced an alarming decline in water quality.

The University of Maine continues to collaborate with citizens across the state to monitor the lake water quality of 24 Maine lakes. Through this collaboration, a "Lake Vulnerability Index" will be created to help predict which lakes are most at risk of declining water quality. The Index will take into account a variety of factors which will inform the public and policy makers of the underlying causes of water quality deterioration. This will allow the state to better address the complex environmental problems the state's lakes are facing.

The project began in 2015 with an initial grant from UMaine's Senator George J. Mitchell Center for Sustainability Solutions. This past year, additional federal funding was awarded which will allow this project to continue into 2018.

#### **Darling Marine Center Lowes Cove Pier**

The new Lowes Cove pier at UMaine's Darling Marine Center enhances access to the ocean by UMaine faculty and students and enables a variety of new research, education, and workforce development opportunities. Located on the shore of the Damariscotta River in Walpole, the new pier is a critical element of the waterfront infrastructure needed to support research on commercially valuable marine species, including oysters, clams, and lobsters. The new pier also facilitates use of the DMC's experimental aquaculture lease by industry and community partners. DMC training and workforce development programs - including K-12 programs, professional training for current and aspiring shellfish farmers, and courses for citizen scientists, resource managers, and other decision makers – all will benefit from this new connection to Maine's ocean.

#### Bioengineering students develop pediatric breathing simulator

For a senior capstone project, four bioengineering students (Banton Heithoff of Oldwick, New Jersey; William Breeding of East Granby, Connecticut; Amber Boutiette of Skowhegan, Maine; and Madeline Mazjanis of Portland, Maine) have tackled a major problem facing the healthcare community – the ability to easily and affordably train healthcare professionals to provide respiratory care on a realistic pediatric manikin.

This new method does something most manikins don't have the ability to do – realistically simulate lung and abdominal breathing independently.

By creating a manikin that is a real-life simulation, doctors and nurses may be able to diagnose issues based on the breathing pattern being presented. Additionally, this manikin is more affordable than the realistic training manikins on the market. All too often, the cost is a major barrier to health care professionals, and as a result end up with a cheaper option that simply isn't accurate.

Members of this student team have continued to develop this technology beyond their capstone class and are in the process of bringing it to market through their new spinoff company, Zephyrus Simulation LLC. To date, they have received \$10,000 in grant funding from the Maine Technology Institute and the Libra Future Fund.

#### **SMART Program Nationally Recognized with NSF Grant**

The University of Maine's College of Engineering was awarded a \$300,000 grant from the National Science Foundation's INCLUDE program to continue its work on the Stormwater Management Research Team (SMART) Program. This NSF-EPSCoR Track III funded program has created a way for high school girls and minority students to engage in learning through experiential projects focused on engineering and science, particularly around community water research. Over the course of a year, selected high school students generate ideas for solutions to the storm water management problem by collaborating with their teachers and the communities in which they live.

By the end of first year, 150 high school students and 15 teachers were trained and part of this state-wide effort. As one of 37 selected programs, UMaine will be in the running to be one of the five final projects to receive an additional \$12.5 million in funding at the end of two years.

#### Biofuels may be the future of Maine forestry

Many Maine communities have felt the effects of declining paper industries. In order to revitalize the economies of these towns across the state, it is crucial to find alternative and innovative uses for the mills and resources that are currently underutilized. The Forest Bioproducts Research Institute has been addressing this problem through research into nanocellulose, a forest-based bioproduct, that is showing a variety of useful applications in a range of industries.

A pilot plant was started at the University of Maine's Technology Research Center (TRC) in Old Town, Maine. This new pilot plant is able to process up to 1 ton of woody biomass every day, with the ability to run 100 continuous hours. This woody biomass is processed into chemicals that can be used to manufacture a variety of bioproducts including biofuels, biochemicals and advanced materials. One such example is the conversion of nanocellulose into commercial transportation fuel such as diesel and jet fuel.

#### Food Studies Program Boost Local Agriculture and Combats Food Insecurities

USM's Food Studies Program is designed to use local food production to help with the food insecurity issue the state of Maine currently faces. This program provides a comprehensive learning experience about food systems, combining in-depth classroom learning with real world experiences. It fosters University partnerships with businesses in the food sector, helping to build capacity and expertise. The goal is to increase the revenues of local agriculture while simultaneously increasing the number of people being fed.

An undergraduate minor in Food Studies was launched in January 2017. Faculty/student research has played an important role in the initial stages of the program through involvement in an important collaborative research report produced by Good Shepherd Food Bank and Preble Street. Students worked on additional research with business owners and presented to a community panel of experts.

#### **Maine Regulatory Training and Ethics Center**

There is a need for Maine businesses to have assistance navigating a complex regulatory environment. The Maine Regulatory Training and Ethics Center (MeRTEC) was founded to serve Maine's seven sectors to develop regulatory compliance professional development training and certification that will allow graduates to provide consultation to businesses about maintaining compliance to regulations in a cost-effective manner, regardless of the field or sector.

One example is of where MeRTEC has help navigate the laws and regulations of a particular industry was in regard to the exportation of Maine beers made with Maine malts, leading to the creation of The Maine Beer Box, a project sponsored by the marine shipping company Eimskip and the Maine Brewer's Guild. In March 2017, the Box was sent on a refrigerated cargo container full of Maine craft beers, with over 50 taps on the outside. It returned to Portland filled with Icelandic beers, completing the first-ever global beer exchange. One of MeRTEC's roles is to contribute to the economic development potential of craft breweries in Maine through developing training and business tools about the export regulations relating to beer, specifically in regard to the North Atlantic and European Union.

The partnership with the University of Maine School of Law resulted in co-designing and delivering a professional certificate program to help non-lawyer professionals across Maine in businesses, nonprofits and government agencies navigate the regulatory minefield in such areas as finance, health care, environment and energy. There is also an undergraduate certificate and minor in Regulatory Ethics housed at Lewiston Auburn College.

#### **Environmental Decision Support Tool for Penobscot Bay**

The purpose of this project is to build a framework that will help to develop a holistic view of Penobscot Bay and Estuary, from physics to fish, that is needed to better predict outcomes of restoration, fisheries, aquaculture, and other changes to the system. With a focus on river herring, a local and valued bait fish for the lobster fishery, and their restoration in the Penobscot River and other rivers in Maine, students conducted research to determine if increased numbers of juvenile river herring have led to a trophic cascade within the estuary and to begin the process of developing an environmental decision support tool for the Estuary and Bay. The ultimate goal is to help fisheries and aquaculture rehabilitate and diversify nearshore marine fisheries. Environmental Science Program students worked on the project throughout 2017, including student experience at a busy research lab on the coast of Maine. Two students worked side by side with UMaine faculty and graduate students, contributing to a long-term monitoring effort by the Darling Marine Center. Because of this experience, one student was hired to

work with SEANET, the current Maine EPSCOR Track I grant, on related work in the Penobscot and other estuaries in Maine.

#### **Data Innovation Project**

The Data Innovation Project (DIP) helps nonprofits and small businesses make better data informed businesses decisions. Those involved with the DIP strive to provide access to affordable information and instruction, skilled technical assistance, and open access to a growing data and resource repository. The DIP offers Program Evaluation, Data Clinics, and Workshops that help community organizations and University partners build data literacy and capacity throughout their programs. Over the past year, the DIP has leveraged over \$1.6 million dollars in new funds; held Summit events in Portland and Orono reaching over 250 people representing over 100 for-profit and non-profit organizations; conducted 26 free Data Clinics with non-profits; delivered 14 Workshops focused on theory of change, logic models, and data collection methods; and hired 5 USM Graduate Assistants to work with the DIP and community-based organizations to provide evaluation support.

Norway Spruce: UMaine Testing leads to introduction of new construction-grade lumber It was almost 100 years since a new species of lumber had been approved as construction grade. That hiatus was broken thanks to the testing and research done at the University of Maine's Advanced Structures and Composites Center. The decision by the American Lumber Standards Committee (ALSC) to include Norway Spruce as the newest wood species was based heavily on the tests conducted by the University of Maine.

Before the new designation, Norway Spruce was used primarily for pulpwood, but with the closing of the last mill focused on creating spruce pulp, there was no longer a market for this abundant Maine natural resource.

This is an important event for the state as it opens a variety of new markets to loggers while also benefitting landowners, lumber mills, builders and retailers. The University of Maine worked closely with the forest products industry on this project, and engaged a number of students through the process.

#### Working in Rural Maine to Strengthen the Economy

The USDA awarded \$458,275 to fund a three-year study that examines the characteristics and perceptions of rural communities that have traditionally been dependent on the forestry industry. With a particular focus on youth perceptions, UMaine researchers hope they will gain an understanding of where these young folks see themselves and their communities in the future, as well as how these future choices may affect these communities. Through this project, the goal is to create and foster strong, resilient rural communities by encouraging the youth to seek jobs and pursue entrepreneurship activities within them.

Appendix 1 – University of Maine System Intellectual Property

Table A1-1 - University of Maine System New Patent Applications Filed FY17

Title	Application Type	File Date
MICROFLUIDIC DEVICE AND RELATED METHODS	US	5/31/2017
CONTROLLED POROSITY STRUCTURAL MATERIAL WITH NANOCELLULOSE FIBERS	PCT	3/21/2017
SYSTEMS AND METHODS FOR INTERFERENCE MITIGATION IN PASSIVE WIRELESS SENSORS	US - CONTINUATION	2/14/2017
METHOD OF PRETREATMENT OF PULP TO INCREASE YIELD	US - PROVISIONAL	12/27/2016
SYSTEM AND APPARATUS FOR ILLUMINATING A SPECIMEN	US	12/14/2016
STYLIZED ADAPTIVE MOBILITY DEVICE	US - PROVISIONAL	11/22/2016
HYBRID COMPOSITE MATERIAL SYSTEMS FOR OFFSHORE FLOATING PLATFORMS	US - CONTINUATION	11/8/2016
HIGH EFFICIENCY PRODUCTION OF NANOFIBRILLATED CELLULOSE	US	11/4/2016
DEVICES, SYSTEMS AND METHODS FOR ENDOVASCULAR SURGERY	US - PROVISIONAL	10/20/2016
ALCOHOLIC BEVERAGES AND METHOD OF MAKING THE SAME	PCT	10/17/2016
COMPOSITE LAMINATES	PCT	9/9/2016
COMPOSITE LAMINATES	US - PROVISIONAL	9/8/2016
ADVANCED SEGMENTAL PRECASE CONCRETE HULLS FOR WAVE ENERGY CONVERTERS	US - PROVISIONAL	9/2/2016
COMPOUNDS AND METHODS FOR IMPROVING PLANT PERFORMANCE	MOROCCO	8/8/2016
BIODEGRADABLE MATERIALS AND METHODS OF MAKING THE SAME	US - CONTINUATION	8/3/2016
COMPOUNDS AND METHODS FOR IMPROVING PLANT PERFORMANCE	US - CONTINUATION	8/1/2016

Table A1-2 - University of Maine System Patents Issued FY17

Title	Patent No.	Issue Date
METHOD AND SYSTEM FOR COMPLETE INTERFERENCE MITIGATION IN	9607187 B2	3/28/2017
PASSIVE WIRELESS SENSORS AND RFID TAGS - US	9007 107 BZ	5/20/2017
EXPLOITING PCM WRITE ASYMMETRIES TO ACCELERATE WRITE - US	9601191	3/21/2017
POTATO AF3001-6 (EASTON) - US PLANT VARIETY PROTECTION	5439	3/14/2017
SYSTEM AND APPARATUS FOR ILLUMINATING A SPECIMEN - US	9557551	1/31/2017
COMPOUNDS AND METHODS FOR IMPROVING PLANT PERFORMANCE	9446992	9/20/2016
CONTAINER HAVING COMPOSITE WELDABLE PANEL WITH EMBEDDED DEVICES - US	9,406,209	8/2/2016
FLOATING HYBRID COMPOSITE WIND TURBINE PLATFORM AND TOWER SYSTEM - US	9,394,035 B2	7/19/2016
COMPOSITE WELDABLE PANEL WITH EMBEDDED DEVICES - US	9,396,635	7/19/2016

## Appendix 2 – Maine Economic Improvement Fund Financial History and Tables Table A2-1

#### A HISTORY OF LEGISLATIVE ACTIONS ON APPROPRIATING STATE RESEARCH FUNDS

The following is a summary of the actions of the 118th–127<sup>th</sup> (first regular session) Maine Legislature with regard to appropriating research and development funds to the University of Maine System

#### 118th LEGISLATURE

**March 26, 1997:** Governor signed into law the Economic Improvement Strategy (Chapter 24) that appropriated \$500,000 to UMS for research.

**April 1, 1998:** Governor signed into law the Economic Improvement Strategy (Chapter 643, Part LL, Sec. S-3) that appropriated

\$4 million to UMS for research. These funds were allocated from the FY98 year-end state surplus for use in FY99.

#### 119th LEGISLATURE

**March 15, 1999:** Governor signed into law the Part I Current Services budget (Chapter 16) that appropriated \$4 million in 1999–2000 and 2000–01 to UMS on a "base budget" basis for research. This extends the one-time FY99 \$4 million research appropriation that was funded from the FY98 year-end state surplus.

**June 4, 1999:** Governor signed into law the Part II Supplemental Appropriation budget (Chapter 401) that appropriated an additional \$5.55 million in 1999–00 and an additional \$50,000 in 2000–01 to UMS on a "base budget" basis for research.

**April 25, 2000:** Governor signed into law the Part II Supplemental Appropriation budget (Chapter 731) that appropriated \$300,000 in 2000–01 to UMS on a "base budget" basis for the Maine Patent Program.

#### 120th LEGISLATURE

**June 21, 2001:** Governor signed into law the Part II Supplemental Appropriation budget (Chapter 439) that appropriated an additional \$2 million in 2002–03 to UMS on a "base budget" basis for research.

**March 25, 2002:** Governor signed into law a de-appropriation (Chapter 559) that reduced the FY03 \$2 million Supplemental Appropriation by \$1 million.

**July 1, 2002:** Governor signed a Financial Order that curtailed the FY03 \$2 million Supplemental Appropriation by an additional \$1 million. This eliminated the FY03 increase of \$2 million for research, bringing the FY03 research and development appropriation back to the FY02 level of \$10.1 million.

**November 18, 2002:** Governor signed into law a Supplemental Appropriation budget (Chapter 714) that de-appropriated the \$1 million curtailment that was signed July 1, 2002.

#### 121st LEGISLATURE

**March 27, 2003:** Governor signed into law the Part I Current Services budget (Chapter 20, Part RR) that appropriated \$100,000 in 2003–04 and 2004–05 on a "base budget" basis for research.

**January 30, 2004:** Governor signed into law a Supplemental Appropriation budget (Chapter 513, Part P, Sec. P-2) that includes a provision to transfer to MEIF up to \$2 million of any unbudgeted State revenue remaining at the close of FY04. The full amount was subsequently transferred to UMS. This same Chapter 513, Part P, Sec. P-3 made the \$2 million part of the MEIF FY05 base appropriation.

#### 122nd LEGISLATURE

**March 29, 2006:** Governor signed into law a Supplemental Appropriations budget (Chapter 519, Part A, Sec. A-1) that includes providing one-time funding of \$600,000 in FY07 for the commercialization of research and development activity, and for the Gulf of Maine Ocean Observing System.

#### **123rd LEGISLATURE**

**June 7, 2007:** Governor signed into law a budget (Chapter 240, Part A, Sec. A-68) that provides an increase of \$1.5 million in FY08 and an additional \$1 million in FY09 on a "base budget" basis for research.

#### 124th LEGISLATURE

May 28, 2009: Governor signed into law a budget (Chapter 213, Part A, Sec. A-67) that maintains the annual funding at the FY09 level of \$14.7 million.

#### 125th LEGISLATURE

**June 15, 2011:** Governor signed into law a budget (Chapter 380) that maintains the annual funding at \$14.7 million.

**May 29, 2012:** PUBLIC Law (Chapter 698) creates the formula funding for the *Small Campus Initiative*, reserving a percentage of MEIF exclusively for the five smaller campuses of the University of Maine System.

#### 126th LEGISLATURE

**June 10, 2013:** Governor signs into law (Chapter 225) an amendment to the MEIF statute to include Maine Maritime Academy as a MEIF eligible small campus.

**June 26, 2013:** Legislature approves into law a budget (Chapter 368) that maintains the annual funding at \$14.7 million.

#### 127th LEGISLATURE

**June 30, 2015:** Legislature approves into law a budget (Chapter 267) that increases the annual funding by \$2.65 million in each year of the biennium.

#### 128th LEGISLATURE

**July 4, 2017:** Governor signs into law the state budget that maintains the annual funding at \$17.35 million (FY17/FY18).

**Table A2-2**LEGISLATIVE HISTORY MEIF NEW APPROPRIATIONS

LEGISLATIVE	HISTORY OF STATE RESEARC	H APPROPRIATIONS FOR O	PLICATRONS
	NEW APPROF	PRIATION	
118" LEGISLATUR	RE		
	FY98	FY99	Total 2-Yes
UM	\$400,000	\$3,200,000	\$3,600,000
USM	100,000	800,000	900,000
Total	\$500,000	\$4,000,000	\$4,500,000
119" LEGISLATUR	RE		
	FY00	FY01	Total 2-Yes
UM	54,440,000	\$40,000	54,480,000
USM	1,110,000	10,000	1,120,000
Total	55,550,000	\$50,000	\$1,600,000
120" LEGISLATUR	RE		
	FY02	FY03	Total 2-Yea
UM	50	50	54
USM			
Total	50	50	
121" LEGISLATUR	RE		
UM	FY04	FY05	Total 2-Year
USM	\$80,000 20,000	\$1,600,000 400,000	\$1,680,000
Total	\$100,000	52,000,000	52,100,000
122™LEGISLATUI	RE		
	FY06	FY07	Total 2-Yea
UM	50	\$340,000	5540,000
USM Total	50	60,000	\$60,000
*Ose-time funding	30	5600,000	500,00
123" LEGISLATUF	RE		
	FY08	FY09	Total 2-Yes
UM	\$1,200,000	\$720,000	\$1,920,000
USM	300,000	180,000	490,000
INITIATIVES		100,000	100,000
Total	\$1,500,000	\$1,000,000	52,500,000
124th LEGISLATUR	RE		
UM	FY10	FYII 50	Total 2-Yes
USM	50	50	54
INITIATIVES			
Total	50	50_	- 51
1.00	-	-	

125 <sup>th</sup> LEGISLAT			
	FY12	FY13	Total 2-Yes
UM	\$0	\$0	
USM	0	0	
INITIATIVES	0	0	
Total	<u>\$0</u>	\$0	
126 <sup>th</sup> LEGISLAT	URE		
	FY14	FY15	Total 2-Ye
UM	\$0	\$0	
USM	0	0	
INITIATIVES	0	0	
Total	\$0	\$0	
127 <sup>th</sup> LEGISLAT	URE		
	FY16	FY17	Total 2-Ye
UM	\$2,056,400	\$0	\$2,056,4
USM	514,100	0	514,1
INITIATIVES	79,500	0_	79,5
Total	\$2,650,000	\$0	\$2,650,0
128 <sup>th</sup> LEGISLAT	URE		
	FY17	FY18	Total 2-Ye
UM	\$0	\$0	
USM	0	0	
INITIATIVES	0	0	
Total	\$0	\$0	
Total Yearly Re	search Appropriation for FY17	FY17	
rotal rourly ito	F11/		
Total Touris No	Appropriation		
	Appropriation \$13,263,600		
UM			
UM USM	\$13,263,600		
·	\$13,263,600 3,315,900		
UM USM UMM UMFK	\$13,263,600 3,315,900 250,000		
UM USM UMM UMFK UMA	\$13,263,600 3,315,900 250,000		
UM USM UMM	\$13,263,600 3,315,900 250,000 0		
UM USM UMM UMFK UMA UMPI	\$13,263,600 3,315,900 250,000 0		

Table A2-3 UTILIZATION OF FY17 RESEARCH APPROPRIATION BY TARGETED SECTOR

\$ (2,758,662) \$ 2,229,969 3,221,874 1,672,577 1,256,633 1,630,216 2,166,625 1,474,905 926,562 \$ 14,588,360 5,745,820 \$ 20,334,170 (873,467) (872,624) (854,450) (165,559) (15,745,620) R&D 5,745,820 Mization of R&D Fund \$ 1,771,860 \$ 18,562,310 R&D Actual 2,252,7 3,005,8 2,087,8 1,221,541 948,102 2,589,904 1,420,286 2,018,884 1,685,229 232,917 11,629,688 \$ 17,575,508 R&D Funds 5,745,820 (202,135) \$ (1,433,912) Adjusted Unused R&D Funds from Source of R&D Funds to Prior funds (equipment ordered, not received, and not paid). \$ (1,433,710) 280 \$ 19,009,420 Base Budger 5,745,820 13,263,600 UMAINE UM Cost Sharing Funding Precision Manufacturing Cross Sector Total State Funding **Fargeted Research Area** 

Maine Economic Improvement Fund UTILIZATION OF FY2017 OPERATING RESEARCH APPROPRIATION BY TARGETED RESEARCH AREAS

\$ 3,109,863 113,180 326,410 1,455,850 23,565 836,907 139,253 \$ 4,421,749 Transferred Between R&D Mization of R&D Funds Transferred To Match Grants & \$ 4,265,605 R&D Actual 7,531,612 2,136,317 362,919 2,139,356 23,565 836,954 1,768,570 92,180 200,275 1,521,095 22,855 837,318 (4,352,665) Adjusted Unused R&D Funds from 209,757 384,632 34,737 162,644 618,261 710 (364) Source of R&D Funds Adjustment to Prior Years Unused Unused R&D Funds from Prior Years As Reported 209,757 \$ 4,215,712 FY2017 3,315,900 \$ 3,315,900 USM argeted Research Area Total State Funding

Forward To FY2018

629,317

Includes year-end equipment carry-over funds (equipment ordered, not received, ? At USM, projects are funded on a year to year basis with renewals contingent on r.

ance. A majority of the unused funds carried forward into FY18 are committed but not yet allocated to multi year projects Transfers for current year funding of USM R&D programs and awards from "Unassigned". UM base budgets the MEIF appropriation by sector and thus does not use funding transfers.

Table A2-4 UTILIZATION OF FY17 RESEARCH APPROPRIATION BY CAMPUS

Maine Economic Improvement Fund FY2017 SUMMARY UTILIZATION OF OPERATING RESEARCH APPROPRIATION BY UNIVERSITY

Funds Carried Forward To FY2018 (2,759,662) 3,109,863 222,696 24,394 119,987 67,598 128,440 1,075,468 Total R&D Funds Utilized 14,588,350 4,421,749 417,022 82,691 25,020 18,546 58,997 \$ 19,649,995 Between (5,745,820) \$ (5,745,820) Utilization of R&D Funds 1,928,004 18,562,310 4,266,605 417,022 82,691 25,020 18,546 58,997 \$ 23,467,811 7,531,612 639,678 107,085 146,009 38,413 116,565 158,353 159,060 \$ 20,725,463 200,000 145,000 (519,257) 97,257 Adjusted Unused R&D Funds from (1,433,912) 4,215,712 189,678 107,085 Prior Years 3,375,463 Source of R&D Funds Adjustment to Prior Years Unused 0 0 (202) R&D Funds 4,215,712 4,215,712 189,678 107,085 Unused R&D Funds from Prior Years 38,413 39,565 157,101 61,812 As Reported 3,375,665 FY2017 R&D Initial 13,263,600 3,315,900 250,000 Base Budget 520,500 \$ 17,350,000 UMAINE USM UMPI UMPI UMS WMA

Includes year-end equipment carry-over funds (equipment ordered, not received, and not paid). UM Cost Sharing.
Inter-unit R&D funding transfers related to FY2017 MMA abd Small Carrpus Initiative (SCI) awards.



The University of Maine does not discriminate on the grounds of race, color, religion, sex, sexual orientation, including transgender status and gender expression, national origin, citizenship status, age, disability, genetic information, or veteran status in employment, education, and all other programs and activities.

The following person has been designated to handle inquiries regarding nondiscrimination policies: Director, Office of Equal Opportunity, 101 North Stevens Hall, 581.1226, <a href="mailto:eoinfo@umit.maine.edu">eoinfo@umit.maine.edu</a>

#### University of Maine System

# MID CAP GROWTH INVESTMENT COMPARISON

#### CAPTRUST

4208 Six Forks Road, Suite 1700 Raleigh, NC 27609

Our mission is to enrich the lives of our clients, colleagues and communities through sound financial advice, integrity, and a commitment to service beyond expectation.

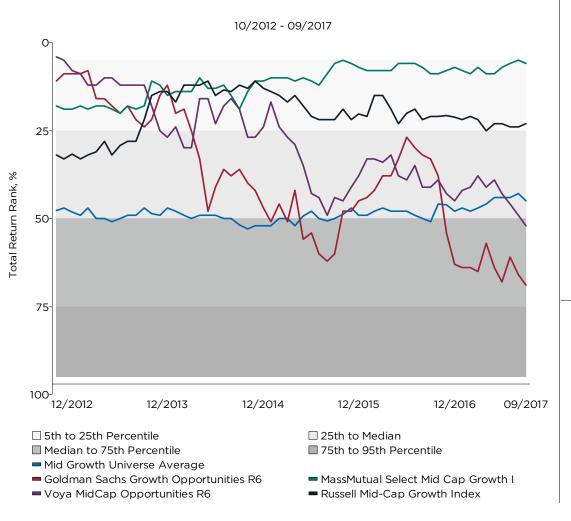
INVESTMENT SUMMARY September 29, 2017

	Goldman Sachs Growth Opportunities R6	MassMutual Select Mid Cap Growth I	Voya MidCap Opportunities R6	Russell Mid-Cap Growth Index	Mid Growth Universe Average
Morningstar Category	Mid-Cap Growth	Mid-Cap Growth	Mid-Cap Growth	-	-
Ticker	GGOUX	MEFZX	IMOZX	-	-
Manager Name	Steven M. Barry	Brian W.H. Berghuis	Jeffrey Bianchi	-	-
Manager Tenure	10.8 years	17.4 years	12.2 years	-	7.1 years
Net Assets (\$MM)	\$2,610.00	\$5,231.00	\$1,412.00	-	\$1,208.78
Expense Ratio	0.93%	0.73%	0.88%	-	1.42%
Current 12b-1	-	-	-	-	-
PERFORMANCE					
Quarter	4.74%	4.28%	2.88%	5.28%	4.56%
YTD	20.34%	19.39%	16.00%	17.29%	17.65%
1 Year	17.10%	19.83%	15.86%	17.82%	18.33%
3 Year	6.89%	13.29%	10.14%	9.96%	9.32%
5 Year	11.67%	16.05%	12.40%	14.18%	12.70%
10 Year	8.06%	9.68%	9.22%	8.20%	7.08%
CALENDAR PERFORMANCE					
2016	1.49%	6.19%	7.25%	7.33%	5.83%
2015	-5.24%	5.95%	0.40%	-0.20%	-0.61%
2014	11.44%	13.00%	8.85%	11.90%	7.11%
2013	32.38%	36.31%	31.67%	35.74%	35.00%
2012	19.58%	14.71%	14.14%	15.81%	14.33%
2011	-3.70%	-1.74%	-0.47%	-1.65%	-3.97%
2010	19.10%	28.03%	30.53%	26.38%	25.33%
MPT STATISTICS (5 YR)					
Standard Deviation	11.04	10.69	10.67	10.88	11.65
Sharpe Ratio	1.04	1.48	1.14	1.28	1.08
Alpha	-2.18	2.38	-1.25	-	-1.44
Beta	0.98	0.96	0.96	1.00	1.00
R Squared	92.65	95.99	96.35	100.00	87.46
PORTFOLIO STATISTICS					
Avg Market Cap	\$14,142.73	\$11,784.56	\$13,402.61	-	\$8,030.74
Total Holdings	77	207	72	-	104
% Assets in Top 10	24.81%	15.71%	21.42%	-	26.95%
% Turnover	55.00%	36.00%	88.00%	-	95.21%

DISCLAIMER: Fund performance depicts historical performance and is not meant to predict future results. Peer group averages are derived from Morningstar and are provided for comparison purposes only. The information and statistics in this report are from sources believed to be reliable, but are not warranted by CAPTRUST Financial Advisors to be accurate or complete. The opinions expressed in this report are subject to change without notice. This material has been prepared or is distributed solely for informational purposes and is not a solicitation or an offer to buy any security or instrument or to participate in any trading strategy. We believe this information to fully satisfy the disclosure requirements of ERISA section 408(b)(2).

#### **INVESTMENT SUMMARY**





#### **ABOUT THIS ANALYSIS**

#### PERCENTILE RANK

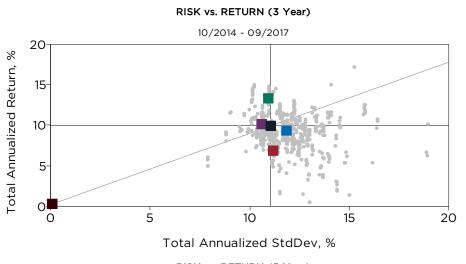
Percentile Rankings are based on an individual fund's performance relative to all other available funds in its universe. Percentiles range from 1, being the best, to 100 being the worst.

#### MEASUREMENT GUIDE

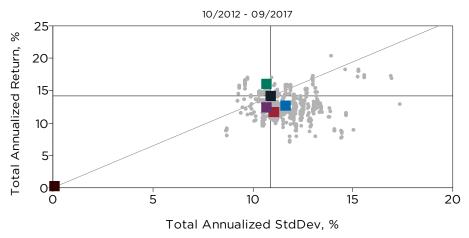
Ideally, managers prefer to be in the 50th percentile or above which demonstrates that they have done better on a relative basis than at least 50% of their peers.

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#### **INVESTMENT SUMMARY**



#### RISK vs. RETURN (5 Year)



#### **ABOUT THIS ANALYSIS**

#### RISK/RETURN

The Risk/Return Graph is highlighted by a straight line connecting the riskless asset, in this case cash, to the risk/return plot of a relevant benchmark index. From Modern Portfolio Theory we know that the slope of this line represents the Sharpe Ratio of the index.

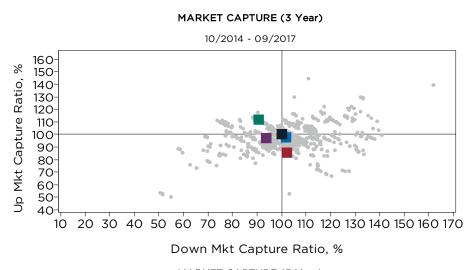
#### MEASUREMENT GUIDE

Given the formula for Sharpe Ratio we can conclude that all points above the line offer a more attractive risk/return trade off than the index over the relevant time period. Consequently, all points below the line offer a less attractive risk/return trade off.

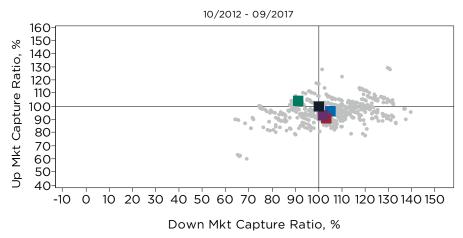
- Mid Growth Universe
- Mid Growth Universe Average
- Goldman Sachs Growth Opportunities R6
- MassMutual Select Mid Cap Growth I
- Voya MidCap Opportunities R6
- Russell Mid-Cap Growth Index

DISCLAIMER: Fund performance depicts historical performance and is not meant to predict future results. Peer group averages are derived from Morningstar and are provided for comparison purposes only. The information and statistics in this report are from sources believed to be reliable, but are not warranted by CAPTRUST Financial Advisors to be accurate or complete. The opinions expressed in this report are subject to change without notice. This material has been prepared or is distributed solely for informational purposes and is not a solicitation or an offer to buy any security or instrument or to participate in any trading strategy. We believe this information to fully satisfy the disclosure requirements of ERISA section 408(b)(2).

#### **INVESTMENT SUMMARY**



#### MARKET CAPTURE (5 Year)



#### **ABOUT THIS ANALYSIS**

#### **CAPTURE RATIO**

Up Market Capture is the average return of the Manager relative to a benchmark index using only periods where the benchmark return was positive. Down Market Capture is the average return of the Manager relative to a benchmark index using only periods where the benchmark return was negative.

#### MEASUREMENT GUIDE

An Up Market Capture of greater than 100% and a Down Market Capture of less than 100% is considered desirable.

- Mid Growth Universe
- Mid Growth Universe Average
- Goldman Sachs Growth Opportunities R6
- MassMutual Select Mid Cap Growth I
- Voya MidCap Opportunities R6
- Russell Mid-Cap Growth Index

DISCLAIMER: Fund performance depicts historical performance and is not meant to predict future results. Peer group averages are derived from Morningstar and are provided for comparison purposes only. The information and statistics in this report are from sources believed to be reliable, but are not warranted by CAPTRUST Financial Advisors to be accurate or complete. The opinions expressed in this report are subject to change without notice. This material has been prepared or is distributed solely for informational purposes and is not a solicitation or an offer to buy any security or instrument or to participate in any trading strategy. We believe this information to fully satisfy the disclosure requirements of ERISA section 408 (b)(2).

**GLOSSARY OF TERMS** 

#### ALPHA

A manager's rate of return in excess of that which can be explained by its systematic risk, or Beta. It is a result of the analysis regressing a manager's returns against those of a benchmark index. A positive alpha implies that a manager has added value relative to its benchmark on a risk-adjusted basis.

#### BETA

A manager's sensitivity to systematic, or market risk. Beta is a result of the analysis regressing a manager's returns against those of a benchmark index. A manager with a Beta of 1 should move perfectly with the benchmark. A Beta of less than 1 implies that a manager's returns are less volatile than the market's. A Beta of greater than 1 similarly implies that a manager exhibits greater volatility than the market.

#### CAPTURE RATIO

A measure of a manager's performance relative to its benchmark under different market conditions. It is the ratio of the average manager return to the average benchmark return. Up market capture refers to relative performance in periods where the benchmark return is greater than 0. Down market capture is calculated over those periods where the benchmark return is less than 0.

#### INFORMATION RATIO

An efficiency measure which estimates a manager's excess return over a benchmark, divided by the volatility of the excess return, or Tracking Error.

#### PERCENTILE RANK

Percentile Rank is based on an individual fund's performance relative to all other available funds in its universe. Percentiles range from 1, being the best, to 100 being the worst. Ideally, managers prefer to be in the 50th percentile or above which demonstrates that they have done better on a relative basis than at least 50% of their peers.

#### R-SQUARED

The portion of a manager's movements that are explained by movements in a benchmark index. R-squared values range from 0 to 100. An R-squared of 100 means that all movements of a manager are completely explained by movements in the index. Also identified as the coefficient of determination from a regression equation, a high R-squared value supports the validity of the Alpha and Beta measures.

#### SHARPE RATIO

A measure of a manager's return per unit of risk. It is the ratio of a manager's excess return above the risk free rate over the standard deviation. A higher Sharpe Ratio implies greater manager efficiency.

#### STANDARD DEVIATION

A measure of the extent to which observations in a series vary from the arithmetic mean of the series. This measure of volatility or risk allows the estimation of a range of values for a manager's returns. The wider the range, the more uncertainty, and therefore the riskier a manager is assumed to be

#### INVESTMENT ANALYSIS - MEDIUM COMPANY GROWTH INVESTMENT SUMMARY September 29, 2017 PLAN NAME: \_\_\_\_\_ Based on information provided by CAPTRUST, the Committee The Committee is choosing to delay action at this agrees to the following fund change/mapping: time for the following reason(s): **CURRENT FUND** Additional analysis requested Re-evaluate at next Committee meeting Goldman Sachs Growth Opportunities R6 **GGOUX** Not presented Not accepted (see notes below) REPLACEMENT FUND (please check one) Other:\_\_\_\_ MassMutual Select Mid Cap Growth I MEFZX Voya MidCap Opportunities R6 IMOZX Notes:\_\_\_\_\_

DISCLAIMER: CAPTRUST is recommending this fund change in accordance with our ongoing fiduciary obligation to review investment options available to the Plan and periodically make recommendations in order to assist the Plan in meeting the criteria designated in the Plan's Investment Policy Statement. Regardless of whether the Plan implements this recommendation, this report will serve as documentation of our effort.

SIGNATURE:

Date:

# **Chapter 5**Fund Flows

#### **SPENDING**

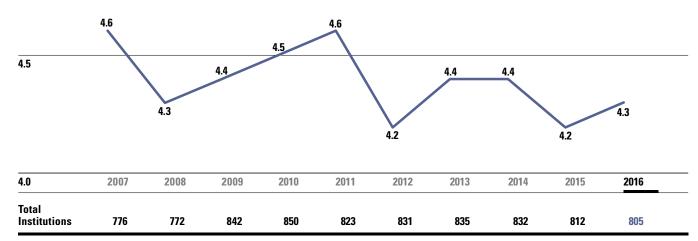
Study participants' average annual effective spending rate this year was 4.3 percent, a modest increase from last year's 4.2 percent. Since there is a lag effect on the moving average

method used by the great majority of colleges and universities in calculating their spending, the increase in the effective spending rate may be attributable to lower returns this year and last.

Figure 5.1 Average Annual Effective Spending Rates' for Total Institutions for Fiscal Years 2007-2016

numbers in percent (%)

5.0%

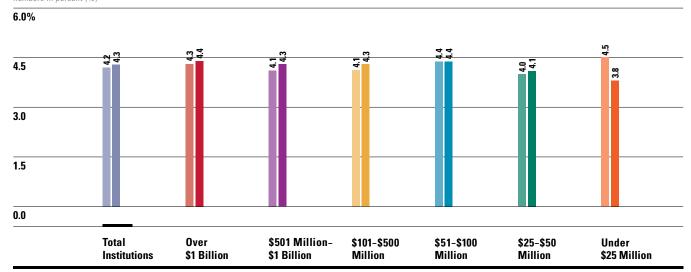


◆ equal-weighted

Source: Fiscal Years 2007-2008, NACUBO Endowment Study

Figure 5.2 Average Annual Effective Spending Rates for Fiscal Years 2015 and 2016

numbers in percent (%)



■ FY2015 ■ FY2016

When data are viewed by size of institution, the highest effective spending rate, at 4.4 percent, was found among institutions with assets over \$1 billion and those with assets between \$51 and \$100 million. Closely behind, at 4.3 percent, were institutions with assets between \$501 million and \$1 billion and those with assets between \$101 and \$500 million. The two smallest size categories had the lowest effective spending rates—4.1 percent for institutions with assets between \$25 and \$50 million and 3.8 percent for those with assets under \$25 million. This is a reversal of spending patterns last year, when institutions in two of the smaller size categories reported the highest effective spending rates—those with assets under \$25 million, a rate of 4.5 percent, and those with assets between \$51 and \$100 million, a rate of 4.4 percent.

When the data are viewed by type of institution, private institutions again reported the highest average effective spending rate, at 4.4 percent, up from 4.3 percent a year ago. Public institutions reported an effective rate of 4.0 percent compared with last year's 3.8 percent. Combined endowment/foundations reported a rate of 4.1 percent while IRFs reported a rate of 3.9 percent, down from last year's 4.2 percent and the lowest effective spending rate among the various types of institutions.



**To:** Tracy Elliott, Director of Finance and Controller

**From:** Jay E. Roney, CTP, Partner and Kelly Regan, Senior Consultant

**Date:** July 10, 2017

**Subject:** Rate of Return Assumption – FY 2017

NEPC would like to update our return expectations for the *University of Maine System Managed Investment Pool*. NEPC's analysis suggests that a return expectation in the range of 6.50% to 7.50% is reasonable. Based upon data highlighted below, there is support for a return assumption of 7.50%. This memo provides background and support for this recommendation.

#### **NEPC Assumptions**

The NEPC Asset Allocation Committee is responsible for the development of our capital market assumptions. The Committee is drawn from a cross section of NEPC's senior personnel representing both the research and consulting functions of the firm, with expertise covering both public and private markets. Prior to publication, the assumptions are reviewed and approved by the Partner's Research Committee, a separate group composed of NEPC Partners responsible for oversight of the firm's research efforts.

The Asset Allocation Committee publishes two sets of capital market return expectations, a longer-term (30 year) and a shorter-term (5-to-7 year) set. While the long-term time horizon for the Plan would argue for using the 30 year assumptions, the Plan's current asset allocation policy is not likely to persist beyond the shorter-term time frame. We therefore believe that a blended approach is preferable.

Many asset class returns are fairly consistent over a long time horizon, thus, the historical record provides the basis for our longer term expectations. Asset class performance can be much more volatile on a shorter-term basis. In order to develop our 5-7 year forward-looking assumptions, we complement our historical analysis with an in-depth look at the current market environment. This forward-looking analysis is based on current market pricing and a building blocks approach. The focus here is on key economic observations (inflation, real growth, valuation measures) and structural themes that can have meaningful effects on asset class performance.

Below please find the 2017 5-7 year and 30 year expected market returns for the University of Maine System's Managed Investment Pool. Please note that there will be significant volatility around these expected returns each year:



Asset Class	Policy Weight	NEPC 5-7 Year 2017	NEPC 30 Year 2017
Large Cap Equities	16.0%	5.75%	7.50%
Small/Mid Cap Equities	6.0%	6.00%	7.75%
International Equities	11.0%	7.25%	7.75%
International Small Cap Equities	5.0%	7.50%	8.25%
Emerging Market Equities	3.5%	9.50%	9.50%
Emerging Small Cap Market Equities	3.5%	10.00%	9.75%
Domestic Core Bonds	5.0%	2.65%	4.00%
TIPS	8.0%	3.00%	3.75%
Bank Loans	5.0%	5.25%	6.00%
Global Asset Allocation	23.0%	6.03%	6.71%
Real Assets (Timber)	3.0%	6.00%	6.00%
Private Equity (Core)	2.0%	8.25%	9.50%
Hedge Funds	9.0%	5.95%	6.47%
TOTAL	100.0%	6.50%	7.50%

(Note: Consistent with past years, the total plan return is not the weighted average of the asset class returns above. Returns above are all geometric average returns. The total plan return is calculated using the arithmetic average return, volatility and correlation of each asset class)

As you can see, our return expectations range from 6.50% to 7.50%. Our assumptions are based on market returns. On that basis, they do not include investment management fees or assumptions for active manager out-performance, or alpha. Each manager structure is different, but NEPC believes in active management and our clients have beaten index returns for most years in most asset classes.

As a result of these inputs, we are comfortable with the use of 7.50% as an expected return, noting that there will be significant volatility around this expected return each year.

Please call us at (617) 374-1300 with any questions.



#### ITEM SUMMARY

1. NAME OF ITEM: Capital Project Status Report

2. INITIATED BY: James H. Page, Chancellor

3. BOARD INFORMATION: X BOARD ACTION:

#### 4. BACKGROUND:

Attached is the Capital Project Status Report for the January 29, 2018 meeting of the Board of Trustees.

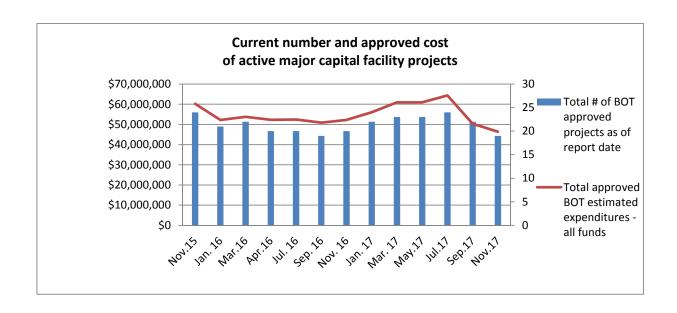
The report reflects a total of 19 projects, with three projects being removed since the previous report, and with no addition of new projects since the previous report.

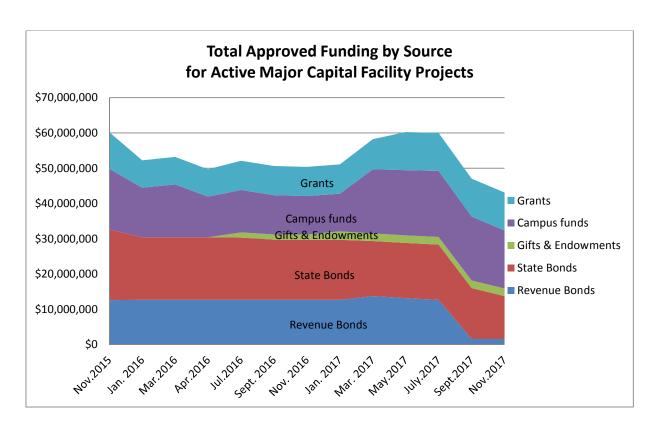
The Aquatic Animal Health Facility project at the University of Maine (project number 5100440) was approved by the Board at the July 2017 meeting, with an initial approved budget of \$2.3M, and has since received an approved increased budget of \$500,000 (roughly 22%), with a revised budget of \$2.8M.

The Lewiston Hall Renovation (1100528) project at UMA is complete and will be removed from the following report.

Five projects on the report which were completed in 2017 continue to be listed and have not yet been marked for removal because, while the construction is complete, the documentation and financial work associated with each has not yet been concluded.

1/18/2018





1/18/2018

#### Capital Project Status Report Board Approved Projects

### January 2018 - Board of Trustees

#### With Grand Totals and % of Current Approved Estimates

	•••	illi Grand Tola	115 unu 70 or	current rippi	oved Estimat		% Expended	
Campus, Project Name (Project ID)	Funding Source(s) & each source's share of expenditures to date	Status	Original Estimated Completion	Current Est. Completion	Original Approved Estimate	Current Approved Estimate	of Current Approved Estimate	Prior Actions, Information & Notes
UM								
Advanced Structures and Composites Center Expansion/ASCC Equip W2-Thermoplastics Lab/ASCC Equip W2 Tow Carriage (5100316, 5100414, 5100432)	Grants (77%), 2010 State Energy Bond (11%), Gifts (12%)	Project 5100316 is Complete, Project 5100414 Design in Progress, Project 5100432 is Design in Progress	2014	2018	\$6,400,000	\$10,400,000	90%	Board Approved \$6.4M in November, 2012. Board approved \$1.6M in March 2014. Board approved increase of \$871,000 in March 2015. BOT approved additional \$1.5M in May 2016 for equipment project.
Cooperative Extension Diagnostic & Research Lab (5100387)	2014 State Bond (85%), Campus E&G Funds (10%), Grants (5%)	Construction in Progress	2016	2018	\$9,000,000	\$9,400,000	72%	BOT approved \$9M in July, 2015. Board approved increase of \$400,000 in July 2017.
** Aquatic Animal Health Facility (5100440)	Grants (82%), Campus E&G Funds (18%)	Design in Progress	2017	2018	\$2,300,000	\$2,800,000	4%	Board approved \$2.3M in January, 2017. Change in project cost to \$2.8M (8.6% change) approved by Chancellor in November 2017 per Trustee policy 701.
Barrow's Hall ESRB Lab Renovations (5100424)	Campus E&G Funds (100%)	Construction in Progress	2017	2018	\$1,900,000	\$1,900,000	17%	Board approved \$1.9M in March, 2017
Memorial Union Bear's Den Renovations (5100427)	Campus AUX Funds (100%)	Construction Complete	2017	2018	\$3,600,000	\$3,600,000	84%	Board approved \$3.6M in March, 2017
Darling Marine Center Waterfront Infrastructure (5200484)	2017 University Bond (100%)	Design in Progress	2017	2018	\$3,000,000	\$3,000,000	0%	Board approved \$3M in July, 2017.
Engineering Education and Design Center (5100458)	Bond (0%), Campus E&G Funds (100%)	Design in Progress	2024	2024	\$1,000,000	\$1,000,000	0%	Board approved \$1M in September, 2017.
UMA								
*** Lewiston Hall Renovation (1100528)	Campus E&G Funds (100%)	Substantially Complete	2016	2017	\$1,000,000	\$1,000,000	99.9%	BOT approved \$1M in September, 2015. Note that an additional \$1M was authorized for this project as part of the 16 Central Street relocation and is being tracked for clarity as part of the 16 Central Street line of this report.
UMF								
Science Labs Renovations (Preble & Ricker (2100065, 2100068)	2013 Lab & Class State Bond (100%)	Substantially Complete	2014	2018	\$1,377,000	\$1,377,000	88%	Board approved \$1.377M in July 2014.
UMFK								
Forestry Geographic Info Sys Tech Labs/Nursing Lab Renov/Teleconf Ctr Upgrades (3100029 3100030 3100031)	2013 Lab & Class State Bond (100%)	Construction in Progress	2014	2018	\$1,200,000	\$1,200,000	99%	Board approved \$1.2M in May 2014.
UMM	·							
Science Building Laboratory Upgrades (4100027)	2013 Lab & Class State Bond (100%)	Substantially Complete	2014	2018	\$600,000	\$600,000	98%	Finance & Facilities Committee Approved \$600K in January, 2014.
Compressed Natural Gas Heating Conversion (4100028)	Revenue Bonds (100%)	Substantially Complete	2014	2017	\$1,800,000	\$1,800,000	84%	Board approved \$1.8M in July 2014.

Campus, Project Name (Project ID)	Funding Source(s) & each source's share of expenditures to date	Status	Original Estimated Completion	Current Est. Completion	Original Approved Estimate	Current Approved Estimate	% Expended of Current Approved Estimate	Prior Actions, Information & Notes
VPA4								
UMM Card Access Project (4100036, 41000037)	Campus E&G Funds (21%), Campus Auxiliary Funds (79%)	Construction in Progress	2018	2018	\$571,000	\$597,500	31%	Board approved \$571,000 in July, 2017. Change in project cost to \$597,500 (4.6% change) approved by Chancellor in October 2017 per Trustee policy 701.
USM								
Campus Card Access Install (6100271)	Campus E&G Funds (100%)	Construction in Progress	2017	2018	\$700,000	\$700,000	83%	Board approved \$700K in March, 2017.
Gorham Softball Field Improvements (6200181)	Campus E&G Funds (100%)	Construction Complete	2015	2017	\$1,500,000	\$2,389,000	94%	BOT approved \$1.5M in July, 2015. Board approved increase to \$2.2M in March, 2016. Change in project cost to \$2.389M (8.6% change) approved by Chancellor in January 2017 per Trustee policy 701.
Brooks Kitchen Exhaust Upgrade (6100245)	Campus E&G Funds (100%)	Construction Complete	2016	2017	\$819,000	\$893,000	87%	Board approved \$819,000 in March, 2016. Change in project cost to \$893K (9.04% change) approved by Chancellor in March 2017 per Trustee policy 701.
Costello Field House Floor Replacement (6100280)	Gifts & Endowments (100%)	Construction Complete	2017	2017	\$900,000	\$900,000	90%	Board approved \$900,000 in November, 2016.
Science Building Renovations & Build-Out (6100274)	Campus E&G Funds (100%)	Construction Complete	2017	2017	\$1,600,000	\$1,600,000	75%	Board approved \$1.6M in January, 2017.
Anderson Hall Renewal & Renovations (6200191, 6100272)	Campus E&G Funds (100%)	Construction in Progress	2017	2018	\$1,250,000	\$1,250,000	16%	Board approved \$1.25M in January, 2017.
Explanatory Notes:  * Project is new as of this report.  ** Details of this project include updates since the last report.  *** This project has been completed since the last report and is not expected to appear on the next report.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			unless otherwise			U 1	ended reflects total expended as of November 30, 2017 entage of the current approved project estimate.

# UNIVERSITY OF MAINE SYSTEM Board of Trustees AGENDA CALENDAR

A working calendar for developing agendas and submitting various reports to the Board has been designed in order to allow maximum planning in organizing presentations and reference materials. The calendar identifies the timetable for submission of items and reports which recur every six to 24 months as well as special reports with specific time lines. It does not include general items which are ordinarily on each Board meeting agenda; e.g., reports and consent agenda. The following agenda is subject to change consistent with scheduling, reporting, and other factors that the Chancellor deems necessary to consider such matters.

The Calendar will be updated and included in the Board Meeting materials on a regular basis.

JANUARY: Academic Affairs

Academic Year Calendar Honorary Degree Nominations

Fiscal Matters

State Research Report

MARCH: Academic Affairs

Tenure Nominations
Tenure Report
Governance/Administration
Board Calendar

**Establishment of Nominating Committee** 

Student Affairs

Spring Enrollment Update

MAY: <u>Fiscal Matters</u>

Budgets and Student Charges Multi-Year Financial Analysis

Governance/Administration

Election of Board Officers Confirmation of Board of Visitors

JULY: Governance/Administration

Appointment of Standing Committees

Human Resources

Annual Report on Named Chairs and Professorships

**SEPTEMBER:** Fiscal Matters

Appropriation Request

**NOVEMBER**: Academic Affairs

Awarding of Academic Degrees

Fiscal Matters

Review of Annual Financial Report

Student Affairs

Official Fall Enrollment Update



# **University of Maine System**

# 2016-17 Degrees Conferred Report

Robert Zuercher – Senior Institutional Research & Planning Analyst January 8, 2018

#### **INTRODUCTION**

The following report provides summary information on degrees conferred at the University of Maine System for the 2016-17 academic year. The notes below apply to all of the tables and charts contained within this report, unless otherwise noted:

- 1. Data for past years may differ from previous reports due to changes in the segregation of data by degree level and discipline. The current report follows the classification standards outlined by the National Center for Education Statistics (IPEDS).
- 2. The 2016-17 academic year for degrees conferred is July 1, 2016 to June 30, 2017.
- 3. Multiple degrees awarded to a single individual within the academic year are counted separately. Multiple degrees are based on independent courses of study (e.g., one in Business and Management and one in Foreign Languages), not multiple majors within the same degree. The figures in this report include only first majors.
- 4. Percentages and may not add to 100% due to rounding.
- 5. Certificate degrees include certificates awarded below and above the baccalaureate level.

<u>Data Source</u>: National Center for Education Statistics (IPEDS) https://nces.ed.gov/ipeds/datacenter/ Retrieved January 4, 2018

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#### **HIGHLIGHTS**

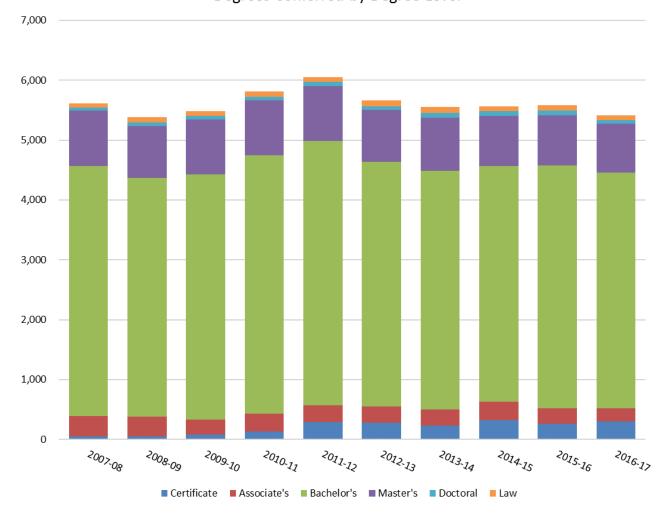
- The University of Maine System conferred 5,419 degrees in 2016-17. In the last decade, the University of Maine System has conferred 56,131 degrees.
- The University of Maine conferred 2,191 degrees in 2016-17, or 40.4% of all degrees awarded in the University of Maine System. The University of Southern Maine conferred 1,712 degrees in 2016-17, or 31.6% of all degrees awarded in the University of Maine System.
- The University of Maine System conferred 3,935 degrees at the baccalaureate level in 2016-17, or 72.6% of all degrees awarded, followed by 818 degrees conferred at the Master's level, or 15.1% of all degrees awarded.
- Women received 60.8 percent of all degrees conferred. Women earned more certificates, associate's degrees, and bachelor's degrees than men.
- The highest number of degrees conferred by discipline in 2016-17 was within Health Professions, with 905 degrees conferred, or 16.7% of all degrees awarded, followed by Education (812 degrees or 15.0% of all degrees awarded) and Business (714 degrees or 13.2% of all degrees awarded) disciplines.
- The University of Maine System conferred 164 fewer degrees in 2016-17 than in 2015-16 a 2.9% decrease. Degrees in Education increased by 105 or 14.9% compared to the previous academic year. Degrees in Business related fields remained relatively flat compared to the previous year, gaining 3 degrees or 0.4%. The System granted 30 fewer Health Professions degrees a decline of 3.2% compared to 2015-16.
- Certificates increased 14.9% from 262 in 2015-16 to 301 in 2016-17. In the same time period, associate's degrees conferred dropped to 217 from 256 a decrease of 15.2%. Bachelor's degrees conferred dropped 3.0% from 4,058 in 2015-16 to 3,935 in 2016-17. Master's degrees conferred fell 2.4% from 838 in the previous academic year to 818 in 2016-17. Doctoral degrees conferred also declined since the previous academic year, from 83 to 63 a 24.1% decrease. Law degrees remained relatively unchanged, going from 86 degrees conferred last year to 85 a decline of 1.2%.
- The University of Maine at Presque Isle has the highest average decrease over the five years shown in degrees conferred at 14.2% followed by a decline of 9.1% at the University of Southern Maine, and a 2.6% decline at the University of Maine Farmington. The University of Maine at Fort Kent saw an average gain of 32.0% over the last five academic years, followed by the University of Maine at Machias, which saw an average increase of 19.0%, and the University of Maine, which had an average increase of 2.6%. The University of Maine at Augusta also saw a slight average increase of 0.4% from 2012-13 to 2016-17.

2016-17 Degrees Conferred Report – The University of Maine System

	Degrees Conferred by Degree Level													
Academic	Certi	Certificate Associate's		Bach	Bachelor's Master's			Doo	toral	L	aw	Total		
Year	#	%	#	%	#	%	#	%	#	%	#	%	#	%
2007-08	56	1.0%	336	6.0%	4,172	74.3%	927	16.5%	50	0.9%	72	1.3%	5,613	100%
2008-09	54	1.0%	328	6.1%	3,983	73.9%	872	16.2%	61	1.1%	91	1.7%	5,389	100%
2009-10	86	1.6%	246	4.5%	4,099	74.7%	914	16.7%	56	1.0%	83	1.5%	5,484	100%
2010-11	137	2.4%	295	5.1%	4,318	74.3%	912	15.7%	63	1.1%	90	1.5%	5,815	100%
2011-12	288	4.8%	279	4.6%	4,423	73.1%	911	15.0%	67	1.1%	86	1.4%	6,054	100%
2012-13	279	4.9%	276	4.9%	4,078	72.0%	874	15.4%	56	1.0%	98	1.7%	5,661	100%
2013-14	235	4.2%	268	4.8%	3,987	71.9%	880	15.9%	83	1.5%	96	1.7%	5,549	100%
2014-15	326	5.9%	300	5.4%	3,945	70.9%	829	14.9%	81	1.5%	83	1.5%	5,564	100%
2015-16	262	4.7%	256	4.6%	4,058	72.7%	838	15.0%	83	1.5%	86	1.5%	5,583	100%
2016-17	301	5.6%	217	4.0%	3,935	72.6%	818	15.1%	63	1.2%	85	1.6%	5,419	100%

**Notes:** Percentages may not add to 100 percent due to rounding. Law contains the Master of Laws (L.L.M.) degree as well as the Juris Doctorate (J.D.).

#### Degrees Conferred by Degree Level

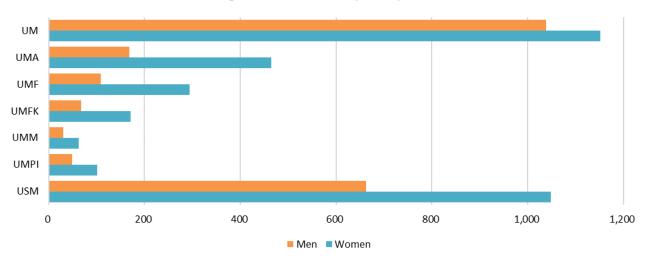


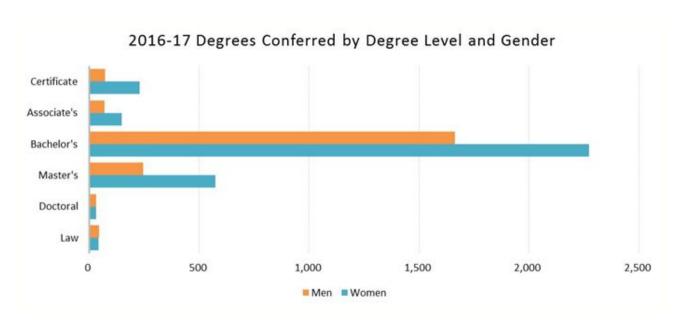
2016-17 Degrees Conferred Report – The University of Maine System

2016	5-17 Deg	rees Cor	ferred l	y Camp	us and (	Gender		
	М	en	Wo	men	Total			
	#	%	#	%	#	%		
UM	1,039	47.4%	1,152	52.6%	2,191	40.4%		
UMA	168	26.6%	464	73.4%	632	11.7%		
UMF	108	26.9%	294	73.1%	402	7.4%		
UMFK	68	28.5%	171	71.5%	239	4.4%		
UMM	30	32.3%	63	67.7%	93	1.7%		
UMPI	49	32.7%	101	67.3%	150	2.8%		
USM	663	38.7%	1,049	61.3%	1,712	31.6%		
Total	2 125	39.2%	3 294	60.8%	5 419	100.0%		

2016-17 Degrees Conferred by Degree Level and Gender										
	М	en	Wo	men	Total					
	#	%	#	%	#	%				
Certificate	71	23.6%	230	76.4%	301	5.6%				
Associate's	70	32.3%	147	67.7%	217	4.0%				
Bachelor's	1,662	42.2%	2,273	57.8%	3,935	72.6%				
Master's	246	30.1%	572	69.9%	818	15.1%				
Doctoral	32	50.8%	31	49.2%	63	1.2%				
Law	44	51.8%	41	48.2%	<i>85</i>	1.6%				
Total	2,125	39.2%	3,294	60.8%	5,419	100.0%				

2016-17 Degrees Conferred by Campus and Gender





2016-17 Degrees Conferred by Discipline and Gender

Women

Total

Discipline # # 31.1% 33 73 68.9% 106 2.0% Agriculture, Agriculture Operations, and Related Sciences 75.0% 0.1% **Architecture and Related Services** 6 2 25.0% 8 Area, Ethnic, Cultural, Gender, and Group Studies 88.9% 9 0.2% 1 11.1% 8 **Biological and Biomedical Sciences** 84 38.5% 134 61.5% 218 4.0% **Business, Management, Marketing, and Related Support Services** 302 13.2% 412 57.7% 42.3% 714 Communication, Journalism, and Related Programs 64 44.4% 80 55.6% 144 2.7% **Computer and Information Sciences and Support Services** 82 83.7% 16.3% 98 1.8% 16 Education 187 23.0% 625 77.0% 812 15.0% **Engineering** 274 80.4% 67 19.6% 341 6.3% **Engineering Technologies and Engineering-Related Fields** 109 92.4% 9 7.6% 118 2.2% 37.0% 154 **English Language and Literature/Letters** 57 97 63.0% 2.8% Family and Consumer Sciences/Human Sciences 4 7.0% 53 93.0% 57 1.1% Foreign Languages, Literatures, and Linguistics 5 27.8% 13 72.2% 18 0.3% 773 **Health Professions and Related Programs** 132 14.6% 85.4% 905 16.7%

36

36

48

85

6

31

27

85

30

12

36

53

38

109

4

39

2,125

61.0%

52.2%

53.9%

32.2%

25.0%

77.5%

29.7%

56.7%

62.5%

75.0%

61.0%

20.9%

20.4%

41.3%

100.0%

39.0%

39.2% 3,294

23

33

41

179

18

9

64

65

18

4

23

201

148

155

0

61

39.0%

47.8%

46.1%

67.8%

75.0%

22.5%

70.3%

43.3%

37.5%

25.0%

39.0%

79.1%

79.6%

58.7%

0.0%

61.0%

60.8% 5,419

59

69

89

264

24

40

91

150

48

16

59

254

186

264

4

100

1.1%

1.3%

1.6%

4.9%

0.4%

0.7%

1.7%

2.8%

0.9%

0.3%

1.1%

4.7%

3.4%

4.9%

0.1%

1.8%

100.0%

Note: Percentages may not add to 100 percent due to rounding.

Liberal Arts and Sciences, General Studies and Humanities

Homeland Security, Law Enforcement, Firefighting and Related Protective Services

History

**Library Science** 

**Physical Sciences** 

**Psychology** 

Total

**Social Sciences** 

**Legal Professions and Studies** 

**Mathematics and Statistics** 

Multi/Interdisciplinary Studies

**Philosophy and Religious Studies** 

**Natural Resources and Conservation** 

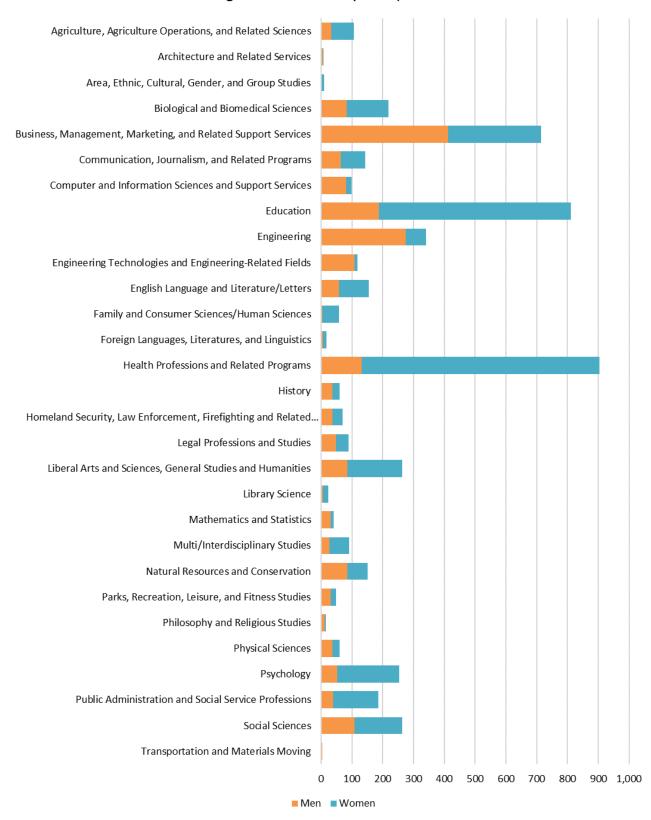
**Transportation and Materials Moving** 

**Visual and Performing Arts** 

Parks, Recreation, Leisure, and Fitness Studies

**Public Administration and Social Service Professions** 

#### 2016-17 Degrees Conferred by Discipline and Gender



2016-17 Degrees Conferred by Discipline: Two-Year Comparison

			Diffe	rence
Discipline	2015-16	2016-17	#	%
Agriculture, Agriculture Operations, and Related Sciences	116	106	(10)	-8.6%
Architecture and Related Services	9	8	(1)	-11.1%
Area, Ethnic, Cultural, Gender, and Group Studies	13	9	(4)	-30.8%
Biological and Biomedical Sciences	233	218	(15)	-6.4%
Business, Management, Marketing, and Related Support Services	711	714	3	0.4%
Communication, Journalism, and Related Programs	157	144	(13)	-8.3%
Computer and Information Sciences and Support Services	88	98	10	11.4%
Education	707	812	105	14.9%
Engineering	361	341	(20)	-5.5%
Engineering Technologies and Engineering-Related Fields	155	118	(37)	-23.9%
English Language and Literature/Letters	182	154	(28)	-15.4%
Family and Consumer Sciences/Human Sciences	52	57	5	9.6%
Foreign Languages, Literatures, and Linguistics	22	18	(4)	-18.2%
Health Professions and Related Programs	935	905	(30)	-3.2%
History	59	59	0	0.0%
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	65	69	4	6.2%
Legal Professions and Studies	86	89	3	3.5%
Liberal Arts and Sciences, General Studies and Humanities	284	264	(20)	-7.0%
Library Science	28	24	(4)	-14.3%
Mathematics and Statistics	38	40	2	5.3%
Multi/Interdisciplinary Studies	97	91	(6)	-6.2%
Natural Resources and Conservation	147	150	3	2.0%
Parks, Recreation, Leisure, and Fitness Studies	31	48	17	54.8%
Philosophy and Religious Studies	12	16	4	33.3%
Physical Sciences	67	59	(8)	-11.9%
Psychology	264	254	(10)	-3.8%
Public Administration and Social Service Professions	220	186	(34)	-15.5%
Social Sciences	317	264	(53)	-16.7%
Transportation and Materials Moving	0	4	4	N/A
Visual and Performing Arts	127	100	(27)	-21.3%
Total	5,583	5,419	(164)	-2.9%

#### **Certificates Conferred by Discipline**

	20	12-13	2013-14		2014-15		2015-16		2016-17	
Discipline	#	%	#	%	#	%	#	%	#	%
Agriculture, Agriculture Operations and Related Sciences	0	0.0%	0	0.0%	3	0.9%	2	0.8%	0	0.0%
Architecture and Related Services	0	0.0%	1	0.4%	4	1.2%	1	0.4%	1	0.3%
Area, Ethnic, Cultural, Gender, and Group Studies	0	0.0%	1	0.4%	1	0.3%	0	0.0%	1	0.3%
Biological and Biomedical Sciences	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.3%
Business, Management, Marketing, and Related Support Services	28	10.0%	32	13.6%	35	10.7%	21	8.0%	30	10.0%
Communication, Journalism, and Related Programs	0	0.0%	0	0.0%	2	0.6%	6	2.3%	5	1.7%
Computer and Information Sciences and Support Services	0	0.0%	1	0.4%	1	0.3%	3	1.1%	3	1.0%
Education	98	35.1%	89	37.9%	143	43.9%	94	35.9%	132	43.9%
Engineering	2	0.7%	1	0.4%	1	0.3%	4	1.5%	7	2.3%
Engineering Technologies and Engineering-Related Fields	0	0.0%	0	0.0%	1	0.3%	1	0.4%	0	0.0%
English Language and Literature/Letters	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.3%
Family and Consumer Sciences/Human Sciences	8	2.9%	8	3.4%	3	0.9%	3	1.1%	4	1.3%
Health Professions and Related Programs	105	37.6%	56	23.8%	78	23.9%	84	32.1%	79	26.2%
Legal Professions and Studies	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	1.3%
Mathematics and Statistics	0	0.0%	0	0.0%	3	0.9%	0	0.0%	0	0.0%
Multi/Interdisciplinary Studies	2	0.7%	5	2.1%	9	2.8%	12	4.6%	9	3.0%
Natural Resources and Conservation	0	0.0%	3	1.3%	6	1.8%	3	1.1%	4	1.3%
Psychology	11	3.9%	6	2.6%	1	0.3%	7	2.7%	7	2.3%
Public Administration and Social Service Professions	16	5.7%	17	7.2%	18	5.5%	7	2.7%	1	0.3%
Social Sciences	9	3.2%	15	6.4%	17	5.2%	14	5.3%	11	3.7%
Visual and Performing Arts	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.3%
Total	279	100.0%	235	100.0%	326	100.0%	262	100.0%	301	100.0%

#### Associate's Degrees Conferred by Discipline

	20	2012-13		2013-14		2014-15		2015-16		16-17
Discipline	#	%	#	%	#	%	#	%	#	%
Business, Management, Marketing, and Related Support Services	23	8.3%	41	15.3%	33	11.0%	30	11.7%	26	12.0%
Communication, Journalism, and Related Programs	0	0.0%	0	0.0%	1	0.3%	0	0.0%	0	0.0%
Computer and Information Sciences and Support Services	11	4.0%	9	3.4%	12	4.0%	10	3.9%	9	4.1%
Health Professions and Related Programs	144	52.2%	141	52.6%	141	47.0%	122	47.7%	85	39.2%
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	28	10.1%	22	8.2%	45	15.0%	27	10.5%	33	15.2%
Liberal Arts and Sciences, General Studies and Humanities	58	21.0%	46	17.2%	53	17.7%	45	17.6%	49	22.6%
Library Science	5	1.8%	4	1.5%	4	1.3%	6	2.3%	4	1.8%
Multi/Interdisciplinary Studies	0	0.0%	0	0.0%	0	0.0%	1	0.4%	1	0.5%
Natural Resources and Conservation	5	1.8%	1	0.4%	8	2.7%	13	5.1%	8	3.7%
Public Administration and Social Service Professions	1	0.4%	2	0.7%	1	0.3%	0	0.0%	1	0.5%
Social Sciences	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.5%
Visual and Performing Arts	1	0.4%	2	0.7%	2	0.7%	2	0.8%	0	0.0%
Total	276	100.0%	268	100.0%	300	100.0%	256	100.0%	217	100.0%

#### **Bachelor's Degrees Conferred by Discipline**

Dacifelot 3 Degrees (	1	12-13	ř .	13-14	20	14-15	20:	15-16	20	16-17
Discipline	#	%	#	%	#	%	#	%	#	%
Agriculture, Agriculture Operations, and Related Sciences	72	1.8%	65	1.6%	77	2.0%	98	2.4%	87	2.2%
Architecture and Related Services	7	0.2%	4	0.1%	3	0.1%	5	0.1%	6	0.2%
Area, Ethnic, Cultural, Gender, and Group Studies	5	0.1%	8	0.2%	10	0.3%	6	0.1%	3	0.1%
Biological and Biomedical Sciences	165	4.0%	192	4.8%	209	5.3%	204	5.0%	198	5.0%
Business, Management, Marketing, and Related Support Services	504	12.4%	515	12.9%	535	13.6%	604	14.9%	607	15.4%
Communication, Journalism, and Related Programs	142	3.5%	158	4.0%	156	4.0%	143	3.5%	130	3.3%
Communications Technologies/Technicians and Support Services	22	0.5%	25	0.6%	0	0.0%	0	0.0%	0	0.0%
Computer and Information Sciences and Support Services	37	0.9%	54	1.4%	57	1.4%	66	1.6%	70	1.8%
Education	467	11.5%	381	9.6%	344	8.7%	309	7.6%	349	8.9%
Engineering	206	5.1%	205	5.1%	230	5.8%	308	7.6%	298	7.6%
Engineering Technologies and Engineering-Related Fields	147	3.6%	135	3.4%	135	3.4%	154	3.8%	118	3.0%
English Language and Literature/Letters	128	3.1%	143	3.6%	110	2.8%	119	2.9%	103	2.6%
Family and Consumer Sciences/Human Sciences	50	1.2%	46	1.2%	36	0.9%	45	1.1%	47	1.2%
Foreign Languages, Literatures, and Linguistics	36	0.9%	30	0.8%	14	0.4%	22	0.5%	16	0.4%
Health Professions and Related Programs	625	15.3%	598	15.0%	636	16.1%	628	15.5%	629	16.0%
History	92	2.3%	69	1.7%	77	2.0%	53	1.3%	55	1.4%
Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	28	0.7%	45	1.1%	51	1.3%	38	0.9%	36	0.9%
Liberal Arts and Sciences, General Studies and Humanities	221	5.4%	232	5.8%	216	5.5%	239	5.9%	215	5.5%
Library Science	31	0.8%	34	0.9%	25	0.6%	22	0.5%	20	0.5%
Mathematics and Statistics	26	0.6%	34	0.9%	28	0.7%	28	0.7%	31	0.8%
Multi/Interdisciplinary Studies	53	1.3%	51	1.3%	62	1.6%	58	1.4%	51	1.3%
Natural Resources and Conservation	81	2.0%	85	2.1%	73	1.9%	101	2.5%	105	2.7%
Parks, Recreation, Leisure, and Fitness Studies	54	1.3%	37	0.9%	48	1.2%	31	0.8%	48	1.2%
Philosophy and Religious Studies	31	0.8%	17	0.4%	12	0.3%	12	0.3%	16	0.4%
Physical Sciences	53	1.3%	44	1.1%	47	1.2%	50	1.2%	42	1.1%
Psychology	248	6.1%	238	6.0%	227	5.8%	224	5.5%	217	5.5%
Public Administration and Social Service Professions	83	2.0%	97	2.4%	97	2.5%	89	2.2%	102	2.6%
Science Technologies/Technicians	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Social Sciences	327	8.0%	324	8.1%	311	7.9%	293	7.2%	242	6.1%
Transportation and Materials Moving	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	0.1%
Visual and Performing Arts	137	3.4%	121	3.0%	119	3.0%	109	2.7%	90	2.3%
Total	4,078	100.0%	3,987	100.0%	3,945	100.0%	4,058	100.0%	3,935	100.0%

#### Master's Degrees Conferred by Discipline

· ·	20	, . 12-13	20	2013-14		14-15	20	15-16	20	16-17
Discipline	#	%	#	%	#	%	#	%	#	%
Agriculture, Agriculture Operations, and Related Sciences	23	2.6%	27	3.1%	20	2.4%	14	1.7%	19	2.3%
Architecture and Related Services	9	1.0%	11	1.3%	10	1.2%	3	0.4%	1	0.1%
Area, Ethnic, Cultural, Gender, and Group Studies	10	1.1%	9	1.0%	15	1.8%	7	0.8%	5	0.6%
Biological and Biomedical Sciences	14	1.6%	29	3.3%	18	2.2%	19	2.3%	13	1.6%
Business, Management, Marketing, and Related Support Services	60	6.9%	70	8.0%	49	5.9%	56	6.7%	51	6.2%
Communication, Journalism, and Related Programs	10	1.1%	5	0.6%	4	0.5%	7	0.8%	8	1.0%
Communications Technologies/Technicians and Support Services	8	0.9%	4	0.5%	0	0.0%	0	0.0%	0	0.0%
Computer and Information Sciences and Support Services	6	0.7%	11	1.3%	11	1.3%	9	1.1%	16	2.0%
Education	320	36.6%	335	38.1%	296	35.7%	299	35.7%	324	39.6%
Engineering	37	4.2%	34	3.9%	21	2.5%	37	4.4%	25	3.1%
English Language and Literature/Letters	55	6.3%	65	7.4%	49	5.9%	63	7.5%	50	6.1%
Family and Consumer Sciences/Human Sciences	6	0.7%	4	0.5%	6	0.7%	4	0.5%	6	0.7%
Foreign Languages, Literatures, and Linguistics	4	0.5%	3	0.3%	3	0.4%	0	0.0%	2	0.2%
Health Professions and Related Programs	91	10.4%	88	10.0%	103	12.4%	98	11.7%	112	13.7%
History	12	1.4%	6	0.7%	4	0.5%	2	0.2%	1	0.1%
Liberal Arts and Sciences, General Studies and Humanities	9	1.0%	3	0.3%	0	0.0%	0	0.0%	0	0.0%
Mathematics and Statistics	10	1.1%	6	0.7%	16	1.9%	10	1.2%	9	1.1%
Multi/Interdisciplinary Studies	17	1.9%	20	2.3%	24	2.9%	21	2.5%	24	2.9%
Natural Resources and Conservation	23	2.6%	19	2.2%	17	2.1%	21	2.5%	22	2.7%
Physical Sciences	19	2.2%	17	1.9%	13	1.6%	12	1.4%	10	1.2%
Psychology	15	1.7%	23	2.6%	4	0.5%	23	2.7%	20	2.4%
Public Administration and Social Service Professions	101	11.6%	75	8.5%	126	15.2%	108	12.9%	81	9.9%
Social Sciences	1	0.1%	4	0.5%	5	0.6%	9	1.1%	10	1.2%
Visual and Performing Arts	14	1.6%	12	1.4%	15	1.8%	16	1.9%	9	1.1%
Total	874	100.0%	880	100.0%	829	100.0%	838	100.0%	818	100.0%

#### **Doctoral Degrees Conferred by Discipline**

	20	12-13	20	13-14	20	14-15	20	15-16	20	16-17
Discipline	#	%	#	%	#	%	#	%	#	%
Agriculture, Agriculture Operations, and Related Sciences	3	5.4%	3	3.6%	3	3.7%	2	2.4%	0	0.0%
Biological and Biomedical Sciences	10	17.9%	12	14.5%	7	8.6%	10	12.0%	6	9.5%
Communication, Journalism, and Related Programs	0	0.0%	3	3.6%	0	0.0%	1	1.2%	1	1.6%
Computer and Information Sciences and Support Services	0	0.0%	3	3.6%	0	0.0%	0	0.0%	0	0.0%
Education	6	10.7%	9	10.8%	4	4.9%	5	6.0%	7	11.1%
Engineering	6	10.7%	6	7.2%	13	16.0%	12	14.5%	11	17.5%
Health Professions and Related Programs	0	0.0%	0	0.0%	0	0.0%	3	3.6%	0	0.0%
History	2	3.6%	3	3.6%	2	2.5%	4	4.8%	3	4.8%
Multi/Interdisciplinary Studies	4	7.1%	12	14.5%	13	16.0%	5	6.0%	6	9.5%
Natural Resources and Conservation	4	7.1%	10	12.0%	12	14.8%	9	10.8%	11	17.5%
Physical Sciences	6	10.7%	8	9.6%	12	14.8%	5	6.0%	7	11.1%
Psychology	10	17.9%	12	14.5%	9	11.1%	10	12.0%	10	15.9%
Public Administration and Social Service Professions	5	8.9%	2	2.4%	6	7.4%	16	19.3%	1	1.6%
Social Sciences	0	0.0%	0	0.0%	0	0.0%	1	1.2%	0	0.0%
Total	56	100.0%	83	100.0%	81	100.0%	83	100.0%	63	100.0%

Note: Percentages may not add to 100 percent due to rounding.

#### Law Degrees Conferred by Discipline

	20	12-13	20	12-13	20	14-15	20	15-16	20	16-17
Discipline	#	%	#	%	#	%	#	%	#	%
Legal Professions and Studies (L.L.M.)	1	1.0%	5	5.2%	5	6.0%	0	0.0%	5	5.9%
Legal Professions and Studies (J.D.)	97	99.0%	91	94.8%	78	94.0%	86	100.0%	80	94.1%
Total	98	100.0%	96	100.0%	83	100.0%	86	100.0%	85	100.0%

•				ļ	Degrees	Conferi	red by	Campus,	Degree	Level,	and Ger	der					
		2012-13			2013-14			2014-15			2015-16			2016-17		5yr Avg	5yr Avg
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	# Chg	% Chg
UM	994	1,108	2,102	989	1,068	2,057	964	1,058	2,022	1,035	1,105	2,140	1,039	1,152	2,191	22.3	2.6%
Certificate	7	46	53	8	31	39	17	56	73	13	46	59	20	61	81	7.0	50.9%
Bachelor's	808	780	1,588	791	749	1,540	784	770	1,554	848	812	1,660	857	824	1,681	23.3	5.0%
Master's	157	258	415	153	248	401	130	196	326	144	217	361	133	238	371	-11.0	-10.6%
Doctoral	22	24	46	37	40	77	33	36	69	30	30	60	29	29	58	3.0	43.1%
UMA	158	531	689	162	487	649	188	551	739	169	531	700	168	464	632	-14.3	0.4%
Certificate	10	62	72	2	39	41	17	57	74	12	64	76	12	47	59	-3.3	34.5%
Associate's	48	191	239	47	160	207	37	184	221	32	161	193	36	118	154	-21.3	-24.3%
Bachelor's	100	278	378	113	288	401	134	310	444	125	306	431	120	299	419	10.3	13.2%
UMF	133	278	411	150	315	465	129	278	407	128	263	391	108	294	402	-2.3	-2.6%
Certificate	0	0	0	1	9	10	7	32	39	4	26	30	6	32	38	N/A	N/A
Bachelor's	133	261	394	146	294	440	119	229	348	121	228	349	101	237	338	-14.0	-9.7%
Master's	0	17	17	3	12	15	3	17	20	3	9	12	1	25	26	2.3	10.7%
UMFK	54	100	154	39	118	157	65	125	190	56	141	197	68	171	239	21.3	32.0%
Associate's	19	5	24	4	9	13	28	10	38	20	9	29	22	7	29	1.3	122.8%
Bachelor's	35	95	130	35	109	144	37	115	152	36	132	168	46	164	210	20.0	33.1%
UMM	29	52	81	25	58	83	36	71	107	27	67	94	30	63	93	3.0	19.0%
Certificate	1	1	2	2	4	6	3	9	12	3	4	7	2	6	8	1.5	261.9%
Associate's	0	2	2	0	3	3	3	6	9	3	6	9	4	5	9	1.8	250.0%
Bachelor's	28	49	77	23	51	74	30	56	86	21	57	78	24	52	76	-0.3	2.4%
UMPI	82	123	205	92	136	228	63	115	178	68	111	179	49	101	150	-13.8	-14.2%
Certificate	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	N/A	N/A
Associate's	5	6	11	21	24	45	9	22	31	6	18	24	8	16	24	3.3	255.4%
Bachelor's	77	117	194	71	112	183	54	93	147	61	93	154	40	85	125	-17.3	-25.3%
USM	729	1,290	2,019	725	1,185	1,910	696	1,225	1,921	705	1,177	1,882	663	1,049	1,712	-76.8	-9.1%
Certificate	37	115	152	41	98	139	47	81	128	23	66	89	30	84	114	-9.5	-39.9%
Associate's	0	0	0	0	0	0	1	0	1	1	0	1	0	1	1	N/A	N/A
Bachelor's	529	788	1,317	506	699	1,205	449	765	1,214	498	720	1,218	474	612	1,086	-57.8	-10.1%
Master's	115	327	442	127	337	464	152	331	483	129	336	465	112	309	421	-5.3	3.0%
Doctoral	2	8	10	2	4	6	1	11	12	12	11	23	3	2	5	-1.3	132.1%
Law	46	52	98	49	47	96	46	37	83	42	44	86	44	41	85	-3.3	-12.3%
Total	2,179	3,482	5,661	2,182	3,367	5,549	2,141	3,423	5,564	2,188	3,395	5,583	2,125	3,294	5,419	-60.5	<b>-2.1%</b>
Certificate	55	224	279	54	181	235	91	235	326	56	206	262	71	230	301	5.5	7.0%
Associate's	72	204	276	72	196	268	78	222	300	62	194	256	70	147	217	-14.8	-9.4%
Bachelor's	1,710	2,368	4,078	1,685	2,302	3,987	1,607	2,338	3,945	1,710	2,348	4,058	1,662	2,273	3,935	-35.8	-1.2%
Master's	272	602	874	283	597	880	285	544	829	276	562	838	246	572	818	-14.0	-4.6%
Doctoral	24	32	56	39	44	83	34	47	81	42	41	83	32	31	63	1.8	42.2%
Law	46	52	98	49	47	96	46	<i>37</i>	83	42	44	86	44	41	85	-3.3	-12.3%

**Note:** Law includes degrees conferred in the Master of Laws (LL.M.) in addition to the Juris Doctorate (J.D.) as of 2012-13. Totals for each university appear at the top of each data set.

			20	16-17	Degree	es Co	nferre	ed by Di	iscipl	ine, C	Degree I	Level,	Cam	ous and	Gen	der								
		UM			UMA			UMF			UMFK			UMM			UMPI			USM			Total	
Discipline & Degree Level	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Womer	Total	Men	Women	Total	Men	Women	Total
Agriculture, Agriculture Operations, and																								
Related Sciences	33	73	106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	73	106
Bachelor's	23	64	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	64	87
Master's	10	9	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	9	19
Architecture and Related Services	0	0	0	4	2	6	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	6	2	8
Certificate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
Bachelor	0	0	0	4	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	6
Master's	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
Area, Ethnic, Cultural, Gender, and Group																								
Studies	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	7	1	8	9
Certificate	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Bachelor's	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	3	3
Master's	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	1	4	5
Biological and Biomedical Sciences	56	72	128	3	13	16	3	5	8	0	7	7	3	9	12	3	6	9	16	22	38	84	134	218
Certificate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1
Bachelor's	48	68	116	3	13	16	3	5	8	0	7	7	3	9	12	3	6	9	13	17	30	73	125	198
Master's	4	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	7	7	6	13
Doctorate	4	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	6
Business, Management, Marketing, and																_								
Related Support Services	173	90	263	30	49	79	21	7	28	17	11	28	4	8	12	13	5	18	154	132	286	412	302	714
Certificate	4	3	7	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0	4	17	21	9	21	30
Associate	0	0	0	9	12	21	0	0	0	1	1	2	1	1	2	0	0	0	0	1	1	11	15	26
Bachelor's	153	78	231	21	37	58	20	7	27	16	10	26	3	6	9	13	5	18	138	100	238	364	243	607
Master's	16	9	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	14	26	28	23	51
Communication, Journalism, and Related																								J1
Programs	40	46	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	34	58	64	80	144
Certificate	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5
Bachelor's	34	38	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	34	58	58	72	130
Master's	5	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3	8
Doctorate	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Computer and Information Sciences and																								
Support Services	21	3	24	19	8	27	6	0	6	5	0	5	0	0	0	0	0	0	31	5	36	82	16	98
Certificate	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3
Associate	0	0	0	4	4	8	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	5	4	9
Bachelor's	14	1	15	14	2	16	6	0	6	4	0	4	0	0	0	0	0	0	26	3	29	64	6	70
Master's	7	2	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	7	12	4	16
Doctorate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Education	95	248	343	1	4	5	27	161	188	0	2	2	1	5	6	4	14	18	59	191	250	187	625	812
Certificate	9	43	52	1	4	5	5	27	32	0	0	0	0	0	0	0	0	0	10	33	43	25	107	132
Bachelor's	65	108	173	0	0	0	21	109	130	0	2	2	1	5	6	4	14	18	7	13	20	98	251	349
Master's	19	92	111	0	0	0	1	25	26	0	0	0	0	0	0	0	0	0	42	145	187	62	262	324
Doctorate	2	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	7
Engineering	248	62	310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	5	31	274	67	341
Certificate	4	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	7
Bachelor's	213	54	267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	5	31	239	59	298
Master's	21	4	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	4	25
Doctorate	10	1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	11

	им			UMA			UMF			UMFK			UMM				UMPI			USM			Total	
Discipline & Degree Level	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men '	Women 1	otal	Men	Women	Total	Men \	Women	Total	Men	Women	Total
Engineering Technologies and Engineering																								
Related Fields	89	5	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	4	24	109	9	118
Bachelor's	89	5	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	4	24	109	9	118
English Language and Literature/Letters	14	26	40	2	4	6	4	16	20	1	2	3	1	4	5	2	2	4	33	43	76	57	97	154
Certificate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
Bachelor's	11	16	27	2	4	6	4	16	20	1	2	3	1	4	5	2	2	4	19	19	38	40	63	103
Master's	3	10	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	24	37	16	34	50
Family and Consumer Sciences/Human	,	10	15	Ŭ				- U		Ü									13		3,	10	J-1	30
Sciences	4	49	53	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	53	57
Certificate	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Bachelor's	4	43	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	43	47
Master's	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
Foreign Languages, Literatures, and		-						-					-								_			
Linguistics	0	4	4	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	5	8	13	5	13	18
Bachelor's	0	2	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	5	8	13	5	11	16
Master's	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Health Professions and Related Programs	15	121	136	34	207	241	10	40	50	19	128	147	0	4	4	5	11	16	49	262	311	132	773	905
Certificate	0	2	2	10	37	47	0	0	0	0	0	0	0	4	4	0	0	0	2	24	26	12	67	79
Associate	0	0	0	9	65	74	0	0	0	0	0	0	0	0	0	4	7	11	0	0	0	13	72	85
Bachelor's	13	96	109	15	105	120	10	40	50	19	128	147	0	0	0	1	4	5	35	163	198	93	536	629
Master's	2	23	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	75	87	14	98	112
History	15	9	24	0	0	0	6	3	9	0	0	0	0	0	0	1	0	1	14	11	25	36	23	59
Bachelor's	13	7	20	0	0	0	6	3	9	0	0	0	0	0	0	1	0	1	14	11	25	34	21	55
Master's	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Doctorate	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3
Homeland Security, Law Enforcement,																								
Firefighting and Related Protective	0	0	0	11	22	33	0	0	0	17	5	22	0	0	0	8	6	14	0	0	0	36	33	69
Associate	0	0	0	4	9	13	0	0	0	12	4	16	0	0	0	3	1	4	0	0	0	19	14	33
Bachelor's	0	0	0	7	13	20	0	0	0	5	1	6	0	0	0	5	5	10	0	0	0	17	19	36
Legal Professions and Studies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	41	89	48	41	89
Certificate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4	0	4
Law - Master (L.L.M.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	1	4	5
Law - Doctor - professional practice (J.D.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	37	80	43	37	80
Liberal Arts and Sciences, General Studies																								
and Humanities	8	6	14	50	110	160	4	5	9	0	6	6	7	8	15	5	24	29	11	20	31	85	179	264
Associate	0	0	0	9	23	32	0	0	0	0	1	1	3	4	7	1	8	9	0	0	0	13	36	49
Bachelor's	8	6	14	41	87	128	4	5	9	0	5	5	4	4	8	4	16	20	11	20	31	72	143	215
Library Science	0	0	0	6	18	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	18	24
Associate	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4
Bachelor's	0	0	0	5	15	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	15	20
Mathematics and Statistics	14	4	18	0	0	0	4	3	7	0	0	0	0	0	0	0	0	0	13	2	15	31	9	40
Bachelor's	11	2	13 5	0	0	0	4 0	3 0	7	0	0	0	0	0	0	0	0	0	10	1	11 4	25 6	6	31 9
Master's	3	2		Ü	0	0	Ŭ		0		0	0	_		0	Ŭ	0 <b>4</b>	0	3	1		, i	3	
Multi/Interdisciplinary Studies	25	50	<b>75</b>	0	2	2	2	<b>6</b>	<b>8</b>	0	0	0	0	0	0	0	•	4	0	2	<b>2</b>	27	64	<b>91</b>
Certificate	2 0	5 0	0	0	0 1	0 1	0	0	0	0	0	0	0	0 0	0	0	0 0	0	0	2 0	0	2	7	9
Associate Bachelor's	12	0 26	0 38	0	1	1	2	6	0 8	0	0	0	0	0	0	0	4	4	0	0	0	14	1 37	1 51
Master's	11	13	38 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	13	24
Doctorate	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
Doctorate	ı	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

		им			UMA		Ī	UMF		Ī	UMFK		İ	имм			UMPI			USM			Total	
Discipline & Degree Level	Men	Women	n Total	Men	Wome	n Total	Men	Womer	1 Total	Men	Women	Total	Men	Women	Total	Men	Wome	n Total	Men	Women	Total	Men	Women	Total
Natural Resources and Conservation	57	43	100	0	0	0	2	4	6	9	1	10	0	1	1	5	1	6	12	15	27	85	65	150
Certificate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	1	3	3	1	4
Associate	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	0	0	0	8	0	8
Bachelor's	41	26	67	0	0	0	2	4	6	1	1	2	0	1	1	4	1	5	10	14	24	58	47	105
Master's	11	11	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	22
Doctorate	5	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	11
Parks, Recreation, Leisure, and Fitness																								
Studies	11	5	16	0	0	0	0	0	0	0	0	0	5	4	9	0	0	0	14	9	23	30	18	48
Bachelor's	11	5	16	0	0	0	0	0	0	0	0	0	5	4	9	0	0	0	14	9	23	30	18	48
Philosophy and Religious Studies	7	0	7	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4	4	8	12	4	16
Bachelor's	7	0	7	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4	4	8	12	4	16
Physical Sciences	26	12	38	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	9	11	20	36	23	59
Bachelor's	15	6	21	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	9	11	20	25	17	42
Master's	6	4	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	4	10
Doctorate	5	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	7
Psychology	22	81	103	0	0	0	9	32	41	0	0	0	6	18	24	1	11	12	15	59	74	53	201	254
Certificate	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	2	2	0	7	7
Bachelor's	20	71	91	0	0	0	9	27	36	0	0	0	6	18	24	1	11	12	12	42	54	48	169	217
Master's	1	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	13	14	2	18	20
Doctorate	1	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	3	7	10
<b>Public Administration and Social Service</b>																								
Professions	12	64	76	3	16	19	0	0	0	0	0	0	0	0	0	0	13	13	23	55	78	38	148	186
Certificate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1
Associate	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Bachelor's	5	34	39	3	15	18	0	0	0	0	0	0	0	0	0	0	13	13	4	28	32	12	90	102
Master's	7	30	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	26	44	25	56	81
Doctorate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
Social Sciences	46	62	108	0	0	0	3	6	9	0	8	8	2	0	2	2	1	3	56	78	134	109	155	264
Certificate	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	6	3	9	8	3	11
Associate	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Bachelor's	40	58	98	0	0	0	3	6	9	0	7	7	0	0	0	2	1	3	50	75	125	95	147	242
Master's	6	4	10	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	6	4	10
Transportation and Materials Moving	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
Bachelor's	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
Visual and Performing Arts	8	15	23	1	5	6	5	6	11	0	0	0	1	2	3	0	3	3	24	30	54	39	61	100
Certificate	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1
Bachelor's	7	9	16	1	5	6	5	6	11	0	0	0	1	1	2	0	3	3	23	29	52	37	53	90
Master's	1	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	7	9
Total	1,039	•	2,191	168	464	632	108	294	402	68	171	239	30	63	93	49	101	150	663	1,049	1,712	2,125	3,294	5,419
Certificate	20	61	81	12	47	59	6	32	38	0	0	0	2	6	8	1	0	1	30	84	114	71	230	301
Associate's	0	0	0	36	118	154	0	0	0	22	7	29	4	5	9	8	16	24	0	1	1	70	147	217
Bachelor's	857	824	1,681	120	299	419	101	237	338	46	164	210	24	52	76	40	85	125	474	612	1,086	1,662	2,273	3,935
Master's	133	238	371	0	0	0	1	25	26	0	0	0	0	0	0	0	0	0	112	309	421	246	572	818
Doctorate	29	29	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	5	32	31	63
Law				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	41	85	44	41	85