Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

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 2013, the State's more than $14 million MEIF investment was leveraged at a rate of 4:1 by our universities for an additional $43,528,964 in Federal and private-sector grants and contracts in the seven sectors at UMaine and USM, our primary MEIF research universities;
- In addition, an MEIF investment of $200,000 in research at the small campuses helped advance important local research;
- The work of over 1000 of researchers, technicians, graduate and undergraduate students, and faculty was supported by MEIF-related projects;
- 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 with small businesses and start-ups, and provided R&D support to more than 400 companies and individuals.

As required in the statute which created the Fund fifteen years ago, included with this letter are the 2012 MEIF financial and informational reports.

If you have any questions about our MEIF projects, this report, or other university research programs, I encourage you to contact Jake Ward at the University of Maine.

Sincerely,

James H. Page
Chancellor

FY2013 Maine Economic Improvement Fund

A HISTORY OF LEGISLATIVE ACTIONS ON APPROPRIATING STATE RESEARCH FUNDS

The following is a summary of the actions of the 118th–126th (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 deappropriation (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 deappropriated 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 MIEF 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.

Maine's Public Universities

UNIVERSITY OF MAINE SYSTEM

UTILIZATION OF FY2013 OPERATING RESEARCH APPROPRIATION

UMAINE

	Source of R&D Funds					Utilization of R&D Funds				Balance
Targeted Research Area	FY2013 R&D Base Budget	Unused R&D Funds from Prior Years As Reported	Adjustment to Prior Years Unused R&D Funds	Adjusted Unused R&D Funds from Prior Years	FY2013 Total R&D Funds Available	FY2013 R&D Actual Expenditures	Transferred To Match Grants & Contracts	Transferred Between R&D Accounts	Total R&D Funds Utilized	Unused Funds Carried Forward To FY2014 [1]
Adv. Technology Forestry & Agriculture	$ 1,940,621	$ 168,972	$ 53,814	$ 222,786	$ 2,163,407	$ 2,393,694	$ 151,671	$ (819,341)	$ 1,726,024	$ 437,383
Aquaculture & Marine Science	1,739,618	(2,542,300)	(925)	(2,543,225)	(803,607)	2,357,451	119,448	(903,634)	1,573,265	(2,376,872)
Biotechnology	867,289	976,596	-	976,596	1,843,885	865,347	38,793	(234,842)	669,298	1,174,587
Composites	2,406,639	738,518	(5,329)	733,189	3,139,828	2,277,847	1,604,867	(810,376)	3,072,338	67,490
Environmental	1,308,525	485,425	(283)	485,142	1,793,667	1,207,891	366,572	(487,677)	1,086,786	706,881
Information Technology	1,552,141	(902,019)	-	(902,019)	650,122	2,158,113	11,269	(673,777)	1,495,605	(845,483)
Precision Manufacturing	1,579,214	127,731	(5,133)	122,598	1,701,812	2,005,128	69,736	(700,400)	1,374,464	327,348
Cross Sector	205,953	(77,983)	(66,321)	(144,304)	61,649	325,190	2,725	(57,904)	270,011	(208,362)
Unassigned - reallocated by System	-	-	(156,976)	(156,976)	(156,976)	-	387,501	-	387,501	(544,477)
Total State Funding	$ 11,600,000	$ (1,025,060)	$ (181,153)	$ (1,206,213)	$ 10,393,787	$ 13,590,661	$ 2,752,582	$ (4,687,951)	$ 11,655,292	$ (1,261,505)
UM Cost Sharing Funding [2]	4,687,951	-	-	-	4,687,951	-	-	4,687,951	4,687,951	-
Total Funding	$ 16,287,951	$ (1,025,060)	$ (181,153)	$ (1,206,213)	$ 15,081,738	$ 13,590,661	$ 2,752,582	$ -	$ 16,343,243	$ (1,261,505)

[1] Includes year-end equipment carry-over funds (equipment ordered, not received, and not paid).
[2] Salary and benefits from University.

USM

	Source of R&D Funds					Utilization of R&D Funds				Balance
Targeted Research Area	FY2013 R&D Base Budget	Unused R&D Funds from Prior Years As Reported	Adjustment to Prior Years Unused R&D Funds	Adjusted Unused R&D Funds from Prior Years	FY2013 Total R&D Funds Available	FY2013 R&D Actual Expenditures	Transferred To Match Grants & Contracts	Transferred Between R&D Accounts	Total R&D Funds Utilized	Unused Funds Carried Forward To FY2014 [1]
Biotechnology	$ 1,613,848	$ 1,200,044	$ (1,198,797)	$ 1,247	$ 1,615,095	$ 1,395,900	$ 116,704	$ (580,938)	$ 931,666	$ 683,429
Information Technology	381,858	21,739	(23,678)	(1,939)	379,919	175,785	356,173	(149,899)	382,059	(2,140)
Precision Manufacturing	222,520	(1,677)	(134)	(1,811)	220,709	68,646	74,999	77,064	220,709	-
Unassigned - reallocated by System	681,774	-	1,222,609	1,222,609	1,904,383	-	436,049	653,773	1,089,822	814,561
Total State Funding	$ 2,900,000	$ 1,220,106	$ -	$ 1,220,106	$ 4,120,106	$ 1,640,331	$ 983,925	$ -	$ 2,624,256	$ 1,495,850

[1] Includes year-end equipment carry-over funds (equipment ordered, not received, and not paid).

FY2013 SUMMARY UTILIZATION OF OPERATING RESEARCH APPROPRIATION

	Source of R&D Funds					Utilization of R&D Funds				Balance
	FY2013 R&D Base Budget	Unused R&D Funds from Prior Years As Reported	Adjustment to Prior Years Unused R&D Funds	Adjusted Unused R&D Funds from Prior Years	FY2013 Total R&D Funds Available	FY2013 R&D Actual Expenditures	Transferred To Match Grants & Contracts	Transferred Between R&D Accounts	Total R&D Funds Utilized	Unused Funds Carried Forward To FY2014 [1]
UMAINE	$ 11,600,000	$ (1,025,060)	$ (181,153)	$ (1,206,213)	$ 10,393,787	$ 13,590,661	$ 2,752,582	$ (4,687,951)	$ 11,655,292	$ (1,261,505)
USM	2,900,000	1,220,106	-	1,220,106	4,120,106	1,640,331	983,925	-	2,624,256	1,495,850
UMM	100,000	34,689	(1,098)	33,591	133,591	69,931	-	-	69,931	63,660
UMFK	-	40,813	27	40,840	40,840	35,942	-	-	35,942	4,898
UMPI	91,875	9,076	9	9,085	100,960	26,844	-	-	26,844	74,116
UMA	-	4,819	10	4,829	4,829	4,829	-	-	4,829	-
UMS	8,125	-	-	-	8,125	8,125	-	-	8,125	-
Total State Funding	$ 14,700,000	$ 284,443	$ (182,205)	$ 102,238	$ 14,802,238	$ 15,376,663	$ 3,736,507	$ (4,687,951)	$ 14,425,219	$ 377,019

[1] Includes year-end equipment carry-over funds (equipment ordered, not received, and not paid).
[2] UM Cost Sharing.

FY2013 Maine Economic Improvement Fund

UMS STATE-FUNDED RESEARCH TIMELINE

Following is a timeline of the MEIF and other state-funded research at the University of Maine System.
Note: Bond funds are used for facility upgrades, construction and equipment purchases in accordance with State bonding requirements

November 3, 1998:

Maine voters approved a $20 million bond issue to improve the Maine economy by supporting innovative research and development. UMS received $13.5 million from this bond for capital improvements and equipment purchases to support research and development. The bond proceeds were distributed between UMaine ($10.8 million) and USM ($2.7 million).

June 4, 1999:

Governor signed into law the Part II Supplemental Appropriation budget (Chapter 401) that appropriated $2.5 million in 2000–01 to UMS on a "base budget" basis to pay the debt service on a $25 million university R&D revenue bond. The university issued the revenue bond August 15, 2000. It provides $20 million for the UMaine Engineering Science Research Building and $5 million for the USM Portland Science Building Lab Renovation.

April 25, 2000:

Governor signed into law a one-time supplemental appropriation (Chapter 731) that appropriated $9 million for the renovation of teaching laboratories and classrooms in Aubert Hall at UMaine.

June 11, 2002:

Maine voters approved a $35 million bond issue to be used in part to stimulate job growth. UMS received $9 million, with the bond proceeds distributed to UMaine ($5 million) for the Advanced Manufacturing Center and to USM ($4 million) for the Mitchell Center.

June 10, 2003:

Maine voters approved a $60 million bond issue to be used to stimulate job creation and economic growth. UMaine and USM received a combined $15 million to support their research efforts, $3.6 million of which was matching funds for MEIF R&D projects.

November 8, 2005:

Maine voters approved a $20 million bond issue to be used to stimulate economic growth and job creation. UMaine received $3 million for the development of the Laboratory for Surface Science and Technology, and renovations associated with the Graduate School of Biomedical Sciences. Maine voters also approved an $8.9 million bond related to agriculture and the environment. UMaine received $800,000 for improvements to the Witter Teaching and Research Farm.

November 6, 2007:

Maine voters approved a $50 million research, development and commercialization bond for facilities and equipment to support the sectors of Maine's economy designated by the Maine Legislature in MEIF legislation. The 2007 bond created the Maine Technology Asset Fund (MTAF), with awards going to Maine companies, universities and non-profit organizations following a peer-reviewed competitive process administered by the Maine Technology Institute. Through the first two rounds of the MTAF program (2008 and 2009), UMaine was awarded nine grants totaling $19.9 million to further support Maine research, development and commercialization efforts. The University of Maine at Presque Isle received a $96,800 grant to implement an information mapping and analysis facility.

June 8, 2010:

Maine voters approved an $11 million bond to create jobs through investment in the Maine off-shore wind energy research and development project, specifically a demonstration site and related advanced composites manufacturing to advance Maine's energy independence. The 2010 bond will leverage $24.5 million in federal funds. Note: for financial reporting purposes, the actual award took place in Fiscal Year 2011.

October 12, 2010:

The Maine Technology Institute completed the third round of the Maine Technology Asset Fund (MTAF) competition, UMaine successfully competed for awards for five projects totaling $3.54 million

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FY2013 SUMMARY OF STATE FUNDING FOR RESEARCH CAPITAL PROJECTS
UMAINE/USM COMBINED

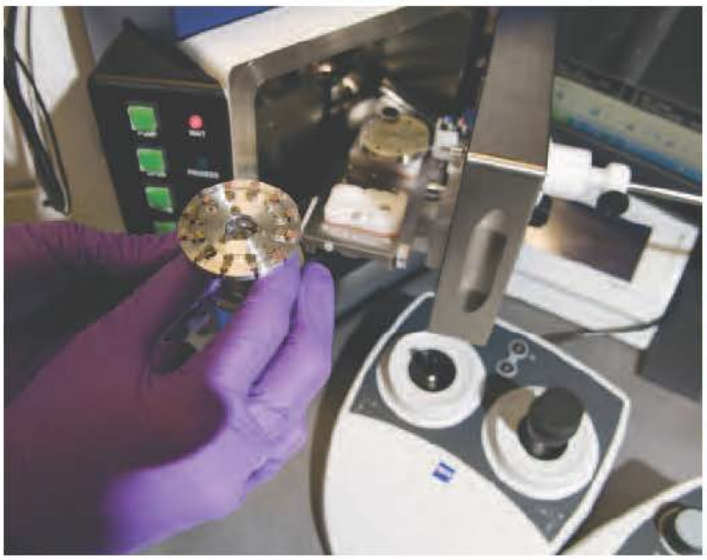
	Referendum Bond Portion	Other Funds	Total Project Budget	Expenditures to Date
FY1999 State Bond Issue (approved by voters 11/3/1998)				
UM	$ 10,800,000	$ 1,168,622	$ 11,968,622	$ 11,968,622
USM	2,700,000	155,100	2,855,100	2,855,100
TOTAL	$ 13,500,000	$ 1,323,722	$ 14,823,722	$ 14,823,722
FY2001 University R&D Revenue Bonds (Debt Service Paid by $2,500,000 State Appropriation - Issued 8/15/2000)				
UM	$ 20,000,000	$ 1,203,296	$ 21,203,296	$ 21,203,297
USM	5,000,219	4,730,426	9,730,645	9,730,645
TOTAL	$ 25,000,219	$ 5,933,722	$ 30,933,941	$ 30,933,942
FY2001 One-Time State Appropriation (signed by Governor 4/25/2000)				
UM	$ 9,000,000	$ 3,446,439	$ 12,446,439	$ 12,446,439
FY2002 State Bond Issue (approved by voters 6/11/2002)				
UM	$ 5,000,000	$ -	$ 5,000,000	$ 5,000,000
USM	4,000,000	45,029	4,045,029	4,045,029
TOTAL	$ 9,000,000	$ 45,029	$ 9,045,029	$ 9,045,029
FY2003 State Bond Issue (approved by voters 6/10/2003)				
UM	$ 7,000,000	$ 799,189	$ 7,799,189	$ 7,799,188
USM	4,400,000	-	4,400,000	4,400,000
TOTAL	$ 11,400,000	$ 799,189	$ 12,199,189	$ 12,199,188
FY2005 State Bond Issue (approved by voters 11/08/2005)				
UM	$ 3,800,000	$ 302,105	$ 4,102,105	$ 4,102,105
FY2010 Maine Marine Wind Energy Demonstration Site Fund (approved by voters 06/08/2010)*				
UM	$ 11,000,000	$ 5,031,711	$ 16,031,711	$ 4,595,293

* Issuance delayed till 2014 - Expenditures updated through FY13

Maine Economic Improvement Fund

Building Maine's Economy through Research, Development and Jobs

A SUCCESSFUL PARTNERSHIP AMONG
MAINE'S PUBLIC UNIVERSITIES, GOVERNMENT AND THE PRIVATE SECTOR



Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

Targeted Research Areas

The University of Maine System directs MEIF dollars specifically to support university-based research in the state's legislatively designated seven strategic technology areas:

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

University-based Research Drives Economic Development

The Maine Economic Improvement Fund is a key component of Maine's science and technology plan. Since the Maine Legislature established it in 1997, MEIF has positioned the University of Maine System at the center of statewide efforts to leverage economic development through targeted investment in university-based R&D. Indicators of success show that Maine's MEIF investment is paying dividends by:

- Creating businesses and jobs, including more than 1,300 for people 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.

MEIF funds often provide the required match to acquire federal or private-sector grants. MEIF money also supports equipment purchases or facilities renovations to make the universities 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.

This document focuses specifically on MEIF-funded university work in the state's seven technology sectors. The two universities with graduate programs in some or all of those targeted research areas have received MEIF funds, with 77.6 percent to the University of Maine, 19.4 percent to the University of Southern Maine, and 3 percent to smaller campuses. In 2009, a small fund was established to promote targeted research at the other five universities.

MEIF History

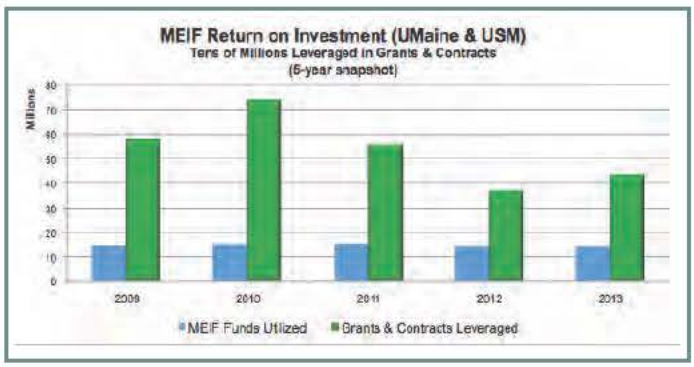
One of Maine's best and most successful public investments began in 1997, when the Maine State Legislature's Joint Standing Committee on Research and Development recommended an investment approach that ultimately led to development of the Maine Economic Improvement Fund (MEIF).

In March 1997, an Economic Improvement Strategy was created. It appropriated $500,000 to the University of Maine System to administer investments in targeted research and development to provide the basic investment necessary to obtain matching funds and competitive grants from private and federal sources.

MEIF continues to be funded through an annual state appropriation and periodically augmented through voter-approved bond referenda. The R&D fund provides researchers at Maine's public universities with the investment necessary to leverage federal and private sector research grants and contracts to:

- Create and sustain economic development and innovation
- Attract and retain world-class researchers
- Provide support for modern laboratories and state-of-the-art equipment
- Create new jobs, products, patents, technologies, companies and exciting opportunities in Maine

Each year, the MEIF investment in university research helps faculty and students successfully leverage tens of millions of dollars in grants and contracts.



MEIF: One of Maine's Best Investments

UMaine recently passed the $100 million-a-year mark in grants and contracts for the first time in history — with the state's MEIF investment playing a key part of that overall research milestone.

UMaine is heavily involved in research and development, with an array of research facilities and resources on its Orono campus as well as at off-campus research sites located around the state. UMaine's extensive research infrastructure, accumulated over many decades, has enabled it to successfully pursue federal and private grants and contracts.

Since 1997, when the State of Maine made its first targeted MEIF investments, UMaine has grown its overall external grants and contracts by more than 250 percent and increased its patent portfolio and spin-off businesses by a factor of 10. Through improvements to its research infrastructure, UMaine has also increased its ability to compete for federal grants and contracts and its capacity to serve its students, as well as Maine business and industry.

For every dollar Maine invests in UMaine through MEIF, researchers have leveraged approximately four dollars from sources outside Maine making it one of the best investments the state makes.

Small Campus Initiative

In 2009, the University of Maine System created the Small Campus Initiative (SCI) to provide Maine Economic Improvement Funds to the five smaller campuses of the University of Maine System. This is a competitive award program to ensure that each university in the System has an opportunity to build and improve research infrastructure and capacity.

In FY13, per statute, $200,000 went to Machias and Presque Isle. The MEIF Small Campus Fund is administered by the University of Maine System Office.

MEIF funding continues to be a critically important tool in USM's efforts to sustain and grow applied R&D programs relevant to Maine's economic and educational needs.

MEIF-supported projects in such areas as bioinformatics, environmental science and health, precision manufacturing, and toxicology link USM researchers to projects that can stimulate economic growth. USM's emphasis on engaging students in faculty research whenever possible also has the benefit of providing learning experiences that will help graduates drive Maine's innovation economy.

University R&D Is a Driving Force in Maine's Economy:

Photo by Edwin Remsberg, USDA

SUCCESS

By leveraging MEIF funds, in the past five years UMaine and USM have attracted more than $250 million in federal and private-sector 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 university research. UMaine utilizes its long-established research capacity to attract the majority of these matching funds. USM continues to build its research capacity in federal and private-sector grants and contracts.

STRATEGIC IMPACT

In the MEIF's most recent five-year period, $341 million was received to perform research and development related to the targeted areas.

CREATING JOBS

More than 1,300 full-time equivalent jobs are funded annually in Maine through the funds leveraged and expended related to MEIF. These positions include faculty, graduate assistantships, undergraduate students involved in research, and other key staff.

For more information about the University of Maine System visit:
maine.edu or call 207.973.3201