

# Economic Impact of the University of Maine System

Measuring the University System's contributions to the state economy



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## Economic Impact on the State of Maine

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#### **Executive Summary**

The University of Maine System is one of the state's most important catalysts for economic growth. In keeping with its mission, it acts as a major resource for the State, linking economic growth, the education of its people, and the application of research and scholarship.

It is impossible, however, to tell the entire story of economic impact. There are numerous intangible benefits derived from the presence of the University System that cannot be quantified. There are social benefits realized through the educational opportunities, business development and public services provided by Maine's public universities. Students who attend the universities are exposed to cutting-edge technology and research, which prepares them for the jobs of the 21<sup>st</sup> century. UMS contributes to Maine's welfare by cultivating a well-educated, knowledgeable and skilled workforce that benefit regional employers in both the public and private sectors.

In the process of fulfilling its mission to the state of Maine, the UMS has a positive impact on the economies of the state and the communities in which the universities reside through expenditures in payroll and the purchase of goods and services. This report attempts to identify and measure this economic impact.

#### Highlights<sup>1</sup>

- Maine's Public Universities have an annual economic impact of over \$1.6 billion on the state of Maine.
- The University System generates \$8.23 of economic activity in Maine for every one dollar of state appropriation.
- UMS provides more than \$426 million annually in income and benefits to more than 12,800 part- and full-time employees, a figure that includes over 7,000 student employees.
- Through economic activity, UMS stimulates an additional 6,290 jobs throughout the state and an additional \$231.8 million in income and benefits
- 3.2 percent of Maine gross state product is stimulated by the activity of the University of Maine System.

<sup>&</sup>lt;sup>1</sup> The work of Todd M. Gabe, Associate Professor of Resource Economics and Policy at the University of Maine, was helpful in generating this report.

#### **UMS Expenditures**

Activities by the University of Maine System resulted in \$934 million (Table 1) during the fiscal year that ended June 30, 2011, the most recent data available.

Total UMS expenditures include \$690.8 million in direct payments. Direct expenditures are costs associated with the day-to-day operation of the seven campuses, the System office and UMS entities such as the University College. The largest expense is payroll, but expenditures also include direct purchases of goods and services.

Direct costs are not the only way UMS contributes to the economy.	TABLE 1Total UMS Expenditures FY11AMOUNTEXPENDITURES		
Students and visitors generate approximately \$243.2 million on	\$211,118,000 426,927,000 52,793,000	Direct Purchases Annual Payroll Capital Improvement	
expenses such as transportation,	\$690,838,000	SUBTOTAL	
food and recreation.	\$243,225,498	Student Spending (non- payroll) & Visitor Spending	
	\$934,063,498	TOTAL	

#### **UMS Revenue Sources**

One of the largest sources of revenue for the University of Maine System is Legislative appropriation. In FY11 the Maine Legislature allocated \$201.9 million to the UMS, representing 28.4% of the System's total revenue. Other sources of revenue include:

- \$238.7 million (33.5%) in student revenues tuition and fees, less scholarships and waivers
- \$168.6 million (23.7%) for research and development from public and private sources
- \$31.4 million (4.4%) for educational sales and services and auxiliary enterprise campus bookstores and other entities supported by user fees
- \$26.4 million (3.7%) from gifts, endowments and investment income
- \$45.1 million (6.3%) from other auxiliary enterprises and indirect cost recovery

#### **Economic "Multiplier Effect"**

Local purchases by the seven universities, nine centers, system-wide services, employees, students and visitors circulate through the Maine economy and causes additional spending from other sources. Every dollar spent creates an economic "multiplier effect" for the state.

This multiplier effect is an important factor to consider when studying the total economic impact of the UMS to the state. Every dollar spent represents a dollar of cash flow into the Maine economy that is used by businesses and organizations to pay employees and taxes and purchase more goods and services.

Using Impact Analysis for Planning (IMPLAN), an economic input-output model developed by the U.S. Department of Agriculture, the multiplier effect was estimated. Including multiplier effects of \$726.4 million (Table 2) UMS contributed over \$1.6 billion in total output to the Maine economy. That figure includes \$704.9 million in income to Maine workers and the support of 21,015 full- and part-time jobs in Maine.

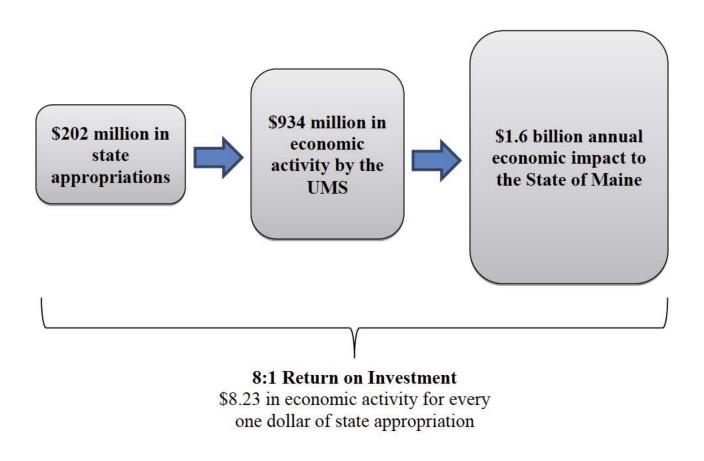
TABLE 2 TOTAL UMS Economic Impact FY11			
	Direct Impact	Multiplier Effect	Total Impact
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Output:			
University Operations	\$690,838,000	\$630,514,626	\$1,321,352,626
Student & Visitor Spending	\$243,225,498	\$95,936,179	\$339,161,677
Total Output	\$934,063,498	\$726,450,805	\$1,660,514,303
Income:			
University Operations	\$426,927,000	\$200,532,966	\$627,459,966
Student & Visitor Spending	\$46,135,562	\$31,285,086	\$77,420,648
Total Income	\$473,062,562	\$231,818,052	\$704,880,614
Employment:			
University Operations	12,825	5,465	18,290
Student & Visitor Spending	1,900	825	2,725
Employment	14,725	6,290	21,015

#### **Overall Impact**

The University of Maine System, through its universities, students, visitors, and affiliated organizations, creates a total economic benefit to Maine of more than \$1.6 billion. That represents a return of \$8.23 for every one dollar in investment. Maine taxpayers realize an 823 percent return on their investment of more than \$201.9 million through state appropriation.

Our communities gain from the presence of Maine's public universities in a variety of other ways as well, including access to professional consulting services, computer and library services, tutoring, seminars, conferences, and workshops hosted throughout the System. UMS students, faculty, and staff also work to improve our well-being by donating thousands of hours each year to local, state, and national boards, organizations, and commissions. Their leadership goes a long way toward focusing attention on critical issues, channeling policies and resources to people in need.

Each of these contributions has a significant – yet immeasurable – economic impact on the regional economy, which was not included in this analysis.



#### **University Economic Impacts**

In addition to understanding the overall economic impact of the University of Maine System, it is important to recognize the impact that each of Maine's public universities has on the state's economy. Although the seven institutions vary in size and mission, all are united in a common role as the educational, cultural and economic centers of their respective regions.

The following summaries estimate the economic impact of each institution within the University of Maine System based on the application of a 'multiplier effect' in proportion to each university's share of UMS expenditures.

TABLE 5Total UMS Expenditures by University FY11					
Direct Expenditures	Payroll	Capital Expenditures	Subtotal	Student & Visitor Spending	Total Expenditures
\$105,306,000	\$208,113,000	\$27,197,000	\$340,616,000	\$92,378,101	\$432,994,101
\$14,402,000	\$29,199,000	\$4,041,000	\$47,642,000,	\$44,834,518	\$92,476,518
\$14,583,000	\$27,702,000	\$5,931,000	\$48,216,000	\$14,991,446	\$63,207,446
\$4,590,000	\$9,235,000	\$414,000	\$14,239,000	\$6,909,869	\$21,148,869
\$5,162,000	\$7,402,000	\$142,000	\$12,706,000	\$5,289,021	\$17,995,021
\$6,924,000	\$12,613,000	\$1,331,000	\$20,868,000	\$10,675,931	\$31,543,931
\$52,071,000	\$122,896,000	\$6,865,000	\$181,832,000	\$68,146,612	\$249,978,612
\$8,080,000	\$9,767,000	\$6,872,000	\$24,719,000	\$0	\$24,719,000
\$211,118,000	\$426,927,000	\$52,793,000	\$690,838,000	\$243,225,498	\$934,063,498
	Expenditures \$105,306,000 \$14,402,000 \$14,583,000 \$4,590,000 \$5,162,000 \$6,924,000 \$52,071,000 \$8,080,000	Direct Expenditures Payroll   \$105,306,000 \$208,113,000   \$14,402,000 \$29,199,000   \$14,583,000 \$27,702,000   \$4,590,000 \$9,235,000   \$5,162,000 \$7,402,000   \$6,924,000 \$12,613,000   \$52,071,000 \$9,767,000	Direct Expenditures Payroll Capital Expenditures   \$105,306,000 \$208,113,000 \$27,197,000   \$14,402,000 \$29,199,000 \$4,041,000   \$14,583,000 \$27,702,000 \$5,931,000   \$4,590,000 \$9,235,000 \$414,000   \$5,162,000 \$7,402,000 \$142,000   \$6,924,000 \$12,613,000 \$6,865,000   \$8,080,000 \$9,767,000 \$6,872,000	Direct ExpendituresPayrollCapital ExpendituresSubtotal\$105,306,000\$208,113,000\$27,197,000\$340,616,000\$14,402,000\$29,199,000\$4,041,000\$47,642,000,\$14,583,000\$27,702,000\$5,931,000\$48,216,000\$4,590,000\$9,235,000\$414,000\$14,239,000\$5,162,000\$7,402,000\$142,000\$12,706,000\$6,924,000\$12,613,000\$1,331,000\$20,868,000\$52,071,000\$122,896,000\$6,865,000\$181,832,000\$8,080,000\$9,767,000\$6,872,000\$24,719,000	Direct ExpendituresPayrollCapital ExpendituresSubtotalStudent & Visitor Spending\$105,306,000\$208,113,000\$27,197,000\$340,616,000\$92,378,101\$14,402,000\$29,199,000\$4,041,000\$47,642,000,\$44,834,518\$14,583,000\$27,702,000\$5,931,000\$48,216,000\$14,991,446\$4,590,000\$9,235,000\$414,000\$14,239,000\$6,909,869\$5,162,000\$7,402,000\$142,000\$12,706,000\$5,289,021\$6,924,000\$12,613,000\$1,331,000\$20,868,000\$10,675,931\$52,071,000\$122,896,000\$6,865,000\$181,832,000\$68,146,612\$8,080,000\$9,767,000\$6,872,000\$24,719,000\$0

TABLE 6 Total Estimated UMS Economic Impact by University FY11					
	Total Expenditures	Multiplier Effects	Total Impact		
UM	\$432,994,101	\$347,865,305	\$780,859,406		
UMA	\$92,476,518	\$60,374,169	\$152,850,687		
UMF	\$63,207,446	\$48,217,044	\$111,424,490		
UMFK	\$21,148,869	\$15,915,747	\$37,064,616		
UMM	\$17,995,021	\$13,189,320	\$31,184,341		
UMPI	\$31,543,931	\$22,851,902	\$54,395,833		
USM	\$249,978,612	\$199,747,108	\$449,725,720		
sws	\$24,719,000	\$18,290,210	\$43,009,210		
Total	\$934,063,498	\$726,450,805	\$1,660,514,303		