



Maine’s public universities are at the forefront of fostering innovation and economic growth in your district and across our state.

Leveraging ongoing State investment in commercially promising research and development (R&D) through the Maine Economic Improvement Fund (MEIF) at a rate of more than 6:1, the University of Maine System (UMS) is driving and diversifying private sector success and workforce development like never before.

But don’t just take our word for it.

In this year’s MEIF report to the Legislature, we’re highlighting the voices of small businesses and students speaking about the value of UMS R&D, led by the University of Maine, the state’s flagship and only institution to have achieved the prestigious R1 Carnegie Classification for very high research activity.

The companies you’ll read about including Compotech, Maine Grains and Timber HP are creating new products and high-paying jobs, increasing productivity and profits, solving industry challenges, improving our environment and quality of life, making food systems safer and more resilient, and expanding their market reach — all with the help of Maine’s public universities.

Their stories of partnership and growth illustrate how essential public university R&D is to Maine’s prosperity. As Harvest Maine said about its collaboration with UMaine food scientists — including Black Bear student researchers — to turn food waste into a value-added consumer product, “We could not have gotten this to market without their help.”

Despite the unmatched rate of return evidenced by testimonials like these, Maine currently invests just 1.1% of its GDP in R&D, far below the national average of 3.6% and 5.7% by other New England states. The condition of our public university research facilities further limits our activity and impact, and we frequently lose world-class faculty to better-resourced institutions in other states.

Strategic, sustained and growing public investment in UMS including through MEIF would catalyze new innovation and opportunity, attract co-investments, cultivate new talent, and improve lives and livelihoods across Maine. In the meantime, Maine’s public universities are proud of what we’ve accomplished with and for our state’s small businesses.

We look forward to continuing to work together with leaders like you and our company and community partners to realize the full potential of public university R&D and of Maine’s economy.

Thank you for your support,

Dannel P. Malloy  
Chancellor, University of Maine System

Joan Ferrini-Mundy  
Vice Chancellor for Research & Innovation, University of Maine System  
President, University of Maine and University of Maine at Machias

## Our goals:

### Generate co-investment

For every \$1 from MEIF, the University of Maine System leverages \$6.45 in co-investment for projects in the seven sectors.

### Establish and grow partnerships

University of Maine System R&D initiatives partner with Maine companies and communities to support and strengthen the economy statewide.

### Focus on workforce development

MEIF projects support undergraduate and graduate students in hands-on, real-world problem-solving preparing them for success in careers in Maine and beyond.

“Maine’s investment in the University of Maine System’s research and development (R&D) directly supports Maine’s most innovative companies and institutions. R&D is an essential driver of growth in every prosperous economy. In Maine, the critical need for R&D investment is highlighted in Maine’s 10-Year Economic Development Plan, by the Maine Economic Growth Council’s Measures of Growth Report and by the Making Maine Work Report. This demonstrates the value of UMS R&D and workforce activity, fundamental to achieving Maine’s economic goals.”

LuAnn Ballesteros  
Chair, the Maine State Chamber of Commerce Board; Member, Maine Economic Growth Council

R1 — UMaine is in the top 146 of universities nationwide for very high research activity.	Maine spends 1.1% of GDP on R&D, compared to 3.6% nationwide and 5.7% in New England.	Maine ranks 37th of the 50 states for R&D spending as a percent of GDP. According to the Maine State Chamber, “Maine lags other states when it comes to R&D investments and that has a long-term cost to our economy in bringing economic opportunity to our state.”
“State government can double its investment in R&D annually without running out of viable projects.”  Making Maine Work (2022)	MDF Measures of Growth has set a goal that Maine’s R&D spending as a proportion of the economy will reach the U.S. average by 2030.	

For more information, contact UMS Director of Government Relations Samantha Warren ([samantha.warren@maine.edu](mailto:samantha.warren@maine.edu)) or visit [umaine.edu/meif](http://umaine.edu/meif)



# Maine Economic Improvement Fund Report 2024

 **Tom Ruff**  
Founder, Orange Bike Brewing Co.

“With support from the University of Maine, we’ve been able to accelerate our growth and increase our positive impact. We can’t thank UMaine enough for making this level of innovation and support accessible to startups like ours. Increased investment in Maine’s public universities is critical for cultivating the next generation of talent and creating meaningful economic opportunities across the state. We look forward to a thriving future for Maine’s entrepreneurial ecosystem.”

 **Mark Ferguson**  
Founder & President, Brant & Cochran

“The resources available at the University of Maine can often be overlooked by the entrepreneurial community in the Pine Tree State. They shouldn’t be! We worked extensively with the university on expanding and re-imagining our axe-making process. This has **increased production by 50% (so far) while simultaneously reducing our costs** and creating a safer and more sustainable business.”

 **Ron Howard**  
Owner, Brodis Blueberries

“Like many Maine farmers, I did not have the technical skills needed to modernize, nor did I have the time to research alternative markets. We partnered with University of Maine engineers to install an optical sorter in our packing line and were matched with a student intern who helped research and introduce a new line of products. **For the first time in years, I believe our ninth-generation wild blueberry farm will survive** and be passed onto to the next generation.”

 **Jeff Wolovitz**  
Owner, Heiwa Tofu

“The University of Maine provides Heiwa Tofu **a broad range of valuable resources that are challenging for a small business such as ours to access elsewhere**. We’ve had support on everything from product development, food safety, equipment design, executive mentoring and summer interns. If we need support when either issues or opportunities arise, we often turn to our university contacts first.”

 **Dustin Manochoa**  
Founder & CEO, Nearpeer

“The University of Maine’s summer internship program has been **instrumental in our growth**. Nearpeer is a Maine-based education technology company which improves college student enrollment, graduation rates, and mental health at colleges and universities across the country. We were recognized in Forbes as ‘a very big deal’ for our innovation and positive impact. Our partnership with UMaine is a great example of public/private partnership, and a win all around for our state economy by advancing Maine’s innovation, economic growth, and workforce development.”

 **Matthew O'Malia**  
CEO, Timber HP

“What we’re doing at Timber HP is taking this technology and thinking about how it fits into our market and more importantly, how do we ensure success. And **UMaine is the partner for us** to do that, because as a company, we simply don’t have the resources or the scientific background or the ability to verify, test and ensure that the products are durable and are going to perform well and also optimize them. They can do all of that.”

 **Parker Jalbert**  
USM Quality Control Collaboratory (QC2), Student Intern

“Working with QC2 and Mast Landing Brewing Co. has provided me with a valuable and fulfilling learning experience while enabling me to directly contribute to my home state. I take great pride in knowing **our research has contributed to the growth** of Mast Landing Brewing Co., the local brewing industry and Maine’s economy as a whole.”

 **Heather and Doug Donahue**  
Owners, Balfour Farm

“As a small-scale dairy and farmstead creamery, our days are often full of the daily production tasks. **The University of Maine provided intern support for our business expansion at a critical time**. Our intern was well prepared to implement our social media strategies and support the increase in wholesale business customers. We are very thankful for the resources from the university and have seen first-hand the positive impact they can have on small businesses like ours.”

 **Amber Lambke**  
President/CEO, Maine Grains

“We need to be as efficient as possible to operate at a small scale. One of the issues we deal with is what to do with our byproducts and the University of Maine is helping us solve that problem. They’ve been a great partner to us in developing recipes that use our underutilized products here at the mill. **Innovating new products with UMaine is going to allow us to reach a larger and larger marketplace.**”

 **Paul Melrose**  
Co-Founder/President, Compotech

“Compotech is about protection. We’re protecting soldiers in the field from ballistic threats and extreme environments. Working at UMaine’s Advanced Structures and Composites Center was a great place to build my skill set. The center runs like a business and so it prepared me to run my own business. My mentors there encouraged me to start Compotech and we’re one of numerous spin-offs that have come out of the university. UMaine is creating amazing talent out of all their programs. And **that talent is really what we need to be able to grow our company.**”

 **Helen Cohen**  
Chief Operations Officer,  
Reach My Teach

“Our two Innovate for Maine interns helped **fast-track one part of our product** that now reaches over 15,000 Maine students. Watching them gain real-world experience—using Figma, building websites, and conducting user interviews—was incredibly rewarding. **Their work is making a real difference for schools**, and we couldn’t have done it without them. Supporting Maine students while building a Maine business feels good and helps us all grow.”

 **Ben Slayton**  
Co-Owner, Harvest Maine

“We had this idea that we could make something delicious and nutritious from the apple pomace that often gets thrown out after apple pressing. The University of Maine helped us take the idea and turn it into a product. The food science intelligence that they brought to the table was critical — we simply did not have that kind of expertise in-house. **We could not have gotten this product to market without their help.**”

 **Janelle Googins**  
USM Quality Control Collaboratory (QC2), Student Intern

“Through QC2 I’ve been able to work with, and directly for, a number of Maine breweries. **The lab has instruments that most Maine breweries don’t**. As an intern in the lab, I use this equipment to perform more advanced analysis than they would normally be able to and develop my own confidence and skills that will lead to more workforce opportunities post-graduation.”

 **Jeannie Tapley**  
Executive Director, Maine Potato Board

“Thanks to our partnership with the University of Maine, this state is one of only three in the country where potato production has actually grown over the last two decades. Our \$1.3 billion industry and the 6,500 jobs it supports in the states depend on UMaine research and development. **Nothing has had a bigger impact on the success and sustainability of our industry** than the Caribou Russet, which they developed through their breeding program.”

### MEIF Small Campus Initiative

The Small Campus Initiative is a competitive grant program that leverages Maine Economic Improvement Fund monies to strengthen statewide capacity for research and development at the Universities of Maine at Augusta, Farmington, Fort Kent, Machias and Presque Isle, as well as Maine Maritime Academy. Projects engage with local partners and support students as they develop workforce skills relevant to Maine’s targeted technology sectors.

Projects funded in 2024 include:

- Repurposing biochar residues as soil amendments (UMFK)
- Expansion of Medical Laboratory Technology workforce training (UMA and UMPI)
- Research to sustainably grow Maine’s wild and cultured shellfish industry (UMaine Machias)
- Biotechnology workforce development (UMF)
- Remediating heavy metals and PFAS-contaminated wastewater (UMPI)