



ANNUAL REPORT 2018



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A Message from MTI's President



DEAR FRIENDS,

It's been an exciting year of change and growth at the Maine Technology Institute.

Thanks to the Maine Technology Asset Fund 2.0 bond, MTI had its most impactful year to date. We put over \$57 million to work and supported 175 innovative projects in almost every corner of the State of Maine. Plus, we have begun implementing our 2017 strategic plan and completely changed our approach to funding innovation.

MTI is Maine's industry-led, publicly funded, nonprofit corporation whose core mission is to diversify and grow Maine's economy. We do this by encouraging, promoting, stimulating, and supporting innovation and its transformation into new products, services, and companies, leading to the creation and retention of quality jobs in Maine.

Fiscal Year 2018, which ended June 30, 2018, was truly one for the record books. In a normal year, MTI is able to put \$6-10 million to work across Maine. The influx of funding from the MTAF2.0 bond multiplied that exponentially. This second MTAF was designed to catalyze private sector innovation. It helped generate \$240 million in private sector matching funds, and according to an independent analysis, will generate 5,350 jobs and \$1.4 billion in economic impact over the next 3 years alone.

In addition, as MTI deployed this extraordinary level of funding, MTI's board and staff also

worked tirelessly to implement changes stemming from our new strategic plan adopted in June 2017. This process was very thorough and has led to MTI launching a new approach to funding innovation in Maine. This new approach, focused on the customer and tailored to their individual needs, has begun as of FY19.

The stories behind these investments are compelling; you'll find some of them in this report and in the accompanying insert that recaps the MTAF2.0 process and awardees. From 120 new jobs at a paper mill in Jay, to a state-of-the-art mouse vivarium in Ellsworth that will lead to both more jobs and advances in medical research, to creating new prospects and expanding markets around the world. MTI's investments will generate meaningful economic impact that will benefit Maine companies, workers, and taxpayers for years to come.

Each month, I write more about Maine's innovation economy from my view as the President of MTI in our newsletter. You can read previous editions of my blog on the website and join the newsletter distribution list for all the latest updates from me and MTI.

I hope you enjoy this year's Annual Report as much as we enjoyed supporting the projects behind it.

A handwritten signature in blue ink, appearing to read "Brian Whitney". The signature is stylized and fluid.

Brian Whitney
President, Maine Technology Institute

FY18 Highlights

175

Awards

\$57M

Funds Distributed

\$240M

Private Sector Matching Funds



Year In Review

Mainers have always been inventive, clever, resourceful, and creative. We even have a name for it: Yankee ingenuity. Without question, Maine workers and entrepreneurs enjoy a well-earned reputation for originality, and possess an unrivaled and legendary work-ethic. Since 1999, MTI has funded innovations developed by Maine inventors in garages all the way up to large public companies, world renowned research organizations, and academic institutions. We have funded diverse projects leading to innovations in gene sequencing and ocean microbial systems, oyster farming in a former lobster pound, melting furnaces for reactive and refractive metal alloys, and innovative, reusable construction and renovation materials, to name but a few.

MTI's programs help innovators accelerate progress to the market, help leverage additional private and public investment, help create quality jobs in Maine, and ultimately, have a positive economic impact across all of Maine. Since its inception, MTI has provided careful stewardship and investment of over \$260 million in public funds across more than 2,500 projects throughout Maine that helped leverage well-over \$1 billion in private sector co-investment.

MTI is critical to the state's economic development strategy and a significant driver in the long-term expansion of research and development assets resulting in the creation of new ventures. In FY18, MTI had its most impressive year in its nearly 20-year history. MTI made 175 awards totaling, in aggregate, \$57,045,269 (matched by \$240,570,345 in private sector funding). According to an independent economic impact analysis, the funding will generate over 5,350 jobs and \$1.4 billion in economic impact in Maine over the next three years.

**TOTAL IMPACT
HISTORIC TO DATE**

\$260M

Stewardship and investment

2,500+

Projects across Maine

\$1B+

Private sector co-investment

**FY18 INVESTMENTS
WILL PRODUCE**

5,350+

Jobs across Maine

\$1.4B

Economic impact in Maine
over the next three years

SUCCESS STORY

”

MTI helped us with both funding and connections. MTI is really putting a stake in the ground around innovation.

Bruce Bickford
Co-Founder & COO

STARC Systems, Inc.

Development Loan | \$500,000

STARC Systems is a fast-growing, innovative building materials manufacturer in Brunswick. MTI has been part of the STARC Systems story from the beginning—in fact, the two co-founders met at an MTI event. Now in a high-growth phase, STARC has hired more employees, increased the quality of its highly competitive benefits package and is bringing Maine-made building products to the national and international stage.

The most recent award from MTI allowed STARC to purchase more machinery to increase capacity and add an additional manufacturing shift. This directly led to hiring staff for these high-quality manufacturing jobs. STARC provides a competitive benefits package for their employees and seeks to improve it each year. STARC expects to employ 25 people for its manufacturing team by the end of 2019.

10
Additional
manufacturing jobs

60%
Growth year-over-year

\$3.5M
Amount of add-on outside
investment

A Year of Internal Change: Implementation of MTI's Strategic Plan

In 2018, MTI embarked on a year-long process to operationalize its recently adopted strategic plan. The implementation plan was completed in the fall of 2018 and included the following changes to MTI's approach to funding innovation in Maine:

- Improvements to application, review and monitoring processes that create an improved customer experience and efficiencies for innovators and staff.
- Improvements to the reporting and monitoring processes that offer a clear understanding of MTI's investments' geographic distribution, impact and performance.
- A tailored and fluid approach to delivering funding and services to innovators and innovation ecosystem partners.

Key Events and Happenings



STARTUP MAINE took place June 21-23 at the Maine College of Art in Portland. The 3-day event brought together inspirational speakers, featured valuable discussion panels, and integrated exhilarating and entertaining evening networking events. The Maine Technology Institute was proud to be a sponsor of Startup Maine and particularly enjoyed the many beneficial stories that were conveyed by Maine's dreamers, doers, and risk takers.



STATE OF THE ENTREPRENEURIAL ECOSYSTEM 2018 was held in Augusta on March 28, celebrating all the things that are occurring in Maine's innovation and entrepreneurship ecosystem. It provided a recap and celebration of the things that happened in 2017 and offered a glimpse into the happenings for 2018. The event, hosted by Maine Accelerates Growth—an MTI-funded initiative—featured short presentations on different topics and offered an opportunity for attendees from organizations across Maine to connect and learn more about the work being done to expand opportunity and prosperity across Maine. Maine Accelerates Growth also released the second year of the Maine Ecosystem Metrics. That document can be found at <http://bit.ly/EcosystemMetrics>



MAINE STARTUP INSIDER COLLABORATION In 2017 and 2018, MTI entered into a sponsored content agreement with Maine Startups Insider (MSI), a website and weekly newsletter focused on Maine's startup community. The goal of this online content marketing series is to share the stories of Maine entrepreneurs and, in particular, companies that have received funding from MTI. The stories can be found here: <http://bit.ly/MSIMTicollab>

Organization

MTI leads the development of a strong culture of innovation in the State of Maine and is well-positioned for continued growth and effectiveness. It is organized as a nonprofit corporation, consistent with the provisions of the Federal Internal Revenue Code. By-laws were drafted and corporation documents filed in September of 1999. A Board of Directors consisting of thirteen voting members and two non-voting members governs MTI. The Governor appoints ten directors, eight representing the targeted technologies and two of whom have demonstrated finance, lending or venture capital experience. The Commissioner of the Maine Department of Economic and Community Development, the Chancellor of the University of Maine System, the President of the Maine Community College System and the Director



of the Office of Policy and Management, or their designees, are ex-officio members. The MTI President is a non-voting director. Seven subsidiary boards, each representing a targeted technology sector, were formed to support the MTI Board. Approximately 120 subject matter experts comprise the membership of these Tech Boards.

MTI operates from its office in Brunswick. The staff, pictured at left, is composed of a director of investment operations, a director of innovation infrastructure, a director of business development, a director of finance and administration, three investment officers, two lending and grant associates, and a web communications manager. The MTI President is employed by the Maine Department of Economic and Community Development.

MTI Funding Programs

MTI makes direct investments in ventures pursuing promising technologies, providing targeted commercialization assistance to Maine companies and strengthening Maine's technology clusters. MTI's investments focus on the sectors of Aquaculture & Marine Technology; Biotechnology; Composites & Advanced Materials; Environmental Technologies; Forest Products & Agriculture; Information Technology; and Precision Manufacturing.

Funding from MTI signals a critical validation or endorsement of an idea, product or service. The MTI application process requires a disciplined approach, demanding that the entrepreneur attempt to define a business model and build a business case for his or her idea, product or service. That validation helps lend credibility and better positions the product or process for

success in the marketplace and with investors and traditional lenders.

MTI works with organizations and individuals focused on expanding the state's entrepreneurial ecosystem to stimulate new venture formation. Regarded as the leader and dominant player in this effort, MTI programs require at least a 1:1 matching contribution from award recipients. MTI award programs are based on scientific or technical merit, commercial feasibility and economic impact potential to the state.

Descriptions and summaries of the award programs follow on the succeeding pages. As a result of implementing our 2017 Strategic Plan, FY18 was the final year for these award programs. Starting in FY19, our funding is more customer-focused and tailored to individual needs.



A grant from MTI helped us improve our product and scale our business. Our business growth means job security and higher wages for employees in rural, Western Maine.

Beth Weisberger, Owner

SUCCESS STORY

Gneiss Spice

Grant | \$25,000

Gneiss Spice, founded in 2009, produces magnetic spice jars in Albany Township and sells primarily online to an out of state market. MTI funds were used to develop prototypes and determine feasibility of a more durable lid design. With the improved lid, Gneiss Spice expects the new design to be a catalyst to scale the business to the next level and to the international marketplace.

Much of the Maine economy is fueled by small businesses, especially in rural Western Maine. Creating a sustainable business with reliable wages is helping Gneiss Spice employees to invest in their own financial security. Additionally, the company donates 5% of their profits to fighting food insecurity in the state. As Gneiss Spice expands, they expect a bigger impact in the local community.

60 Number of spice jars that can fit on an extra large plate

416 Unique spice and seasonings sold

FY18 Funding By Program

<p>SIMPLE NOTES were used in FY18 to fund four noteworthy projects. Those four FY18 awards totaled \$3,500,000 (matched by \$29,325,000).</p>	<p>DEVELOPMENT LOANS, competitive awards of up to \$500,000 per project, were awarded to support the conversion of innovative research into new products, processes and companies. In FY18, MTI funded 9 awards for \$2,513,674 (matched by \$7,518,040).</p>	<p>SEED GRANTS were offered three times in FY2018 to support the conversion of innovative research into new products, processes, and companies. Funded activities could include proof of concept work, prototype development, field trials, prototype testing, pilot studies, or technology transfer activities. MTI offered Seed Grants as direct investments in companies that are pioneering Maine's future through their technology innovations. In FY18, MTI approved 76 awards, representing \$1,643,958 (matched by over \$2,084,071).</p>	<p>CLUSTER INITIATIVE PROGRAM awards were competitive grants aimed to accelerate the strength and scale of Maine's high-potential technology intensive clusters. The Cluster Initiative Program supported the success of Maine businesses through joint work of companies, service providers, research laboratories and educational institutions by funding infrastructure or common programs that help them collectively to be more competitive, develop new products and services and reach new markets. In FY18, MTI approved three awards for \$742,672 (matched by \$897,113).</p>
<p>4 Awards</p> <p>\$3,500,000 Investment</p> <p>\$29,325,000 Match</p>	<p>9 Awards</p> <p>\$2,513,674 Investment</p> <p>\$7,518,040 Match</p>	<p>76 Awards</p> <p>\$1,643,958 Investment</p> <p>\$2,084,071 Match</p>	<p>3 Awards</p> <p>\$742,672 Investment</p> <p>\$897,113 Match</p>

ACCELERATOR

GRANTS were available to startup/early stage companies that had been awarded MTI Development Loans (DLs) and to companies that had recently been chosen for a federal Small Business Innovation Research /Small Business Technology Transfer (SBIR/STTR) Phase I or Phase II grant and/or a Broad Agency Announcement (BAA) award. Funds were to be used to advance the new technology to market and to firmly establish or increase the scope and sustainability of the business enterprise. In FY18, MTI awarded 15 Business Accelerator Grants for \$379,508 (matched by \$1,224,384).

15
Awards

\$379,508
Investment

\$1,224,384
Match

TECHSTART GRANTS

were awarded monthly and could be used to support specific activities such as business plan development, intellectual property filings, market analysis, or technology transfer activities out of research institutions. In FY18, MTI approved 31 awards, representing \$138,118, (matched by \$254,983).

31
Awards

\$138,118
Investment

\$254,983
Match

THE EQUITY CAPITAL FUND

provided investment capital to companies to help them leverage venture funds and individual equity investor capital. In FY18, MTI made one equity investment of \$100,000 (matched by \$1,400,000), on the same terms as lead venture capital funds and individual investors.

1
Award

\$100,000
Investment

\$1,400,000
Match

PHASE 0 KICKSTARTER

GRANTS were offered to individuals and companies seeking to submit federal Small Business Innovation Research and Small Business Technical Transfer (SBIR/STTR) Phase I proposals to one of the eleven participating government agencies. Awards of up to \$5,000 were offered to support competitive federal proposal submissions from Maine applicants. Funds could be used for external direct costs associated with preparing a proposal, such as hiring grant writers, subject matter experts, other consultants or purchasing market research reports needed to inform a proposal. In FY18, MTI awarded 8 Phase Zero Grants for \$39,200 (matched by over \$47,815). These investments and the technical assistance offered by MTI helped secure nearly \$4 million in federal grants in FY18.

8
Awards

\$39,200
Investment

\$47,815
Match



SUCCESS STORY

Community Shellfish

Award: Marine Bond | \$100,000

” Introduction of aquaculture to a traditional working waterfront culture has benefits for all involved; the company, our employees and our fishermen. –Boe Marsh, CEO

Community Shellfish is primarily a seafood wholesaler and dealer in Bremen, Maine. A grant from MTI allowed them to rehabilitate and repurpose a grandfathered, unused lobster pound enclosure for development as a dynamic and innovative aquaculture habitat to grow shellfish. Community Shellfish then started an oyster farm, where the “Cora Cressy Oyster” is grown and then sold to retailers and restaurant distributors up and down the East Coast.

By repurposing an area once used exclusively for commercial fishing, Community Shellfish is creating diversification of income for fishermen and the community—while preserving the working waterfront. This project allowed the company to hire local construction firms and workers, retain seasonal employees throughout the year and add hours for current part-time employees.

50,000

Number of oysters they started with

450,000

Current harvest

800,000

Expected oysters next year

Bond Funded Program Activities

On occasion, the Maine Legislature passes research and development bond initiatives that are presented to Maine voters. Once approved by voters, MTI typically administers the funds on behalf of the State. The following bond initiatives are currently under active management by MTI.

Marine Jobs Fund

In 2014, the Legislature authorized, and the voters of the State of Maine approved, (Public Law 2014, Chapter 592) a \$7,000,000 bond issue to facilitate the growth of marine businesses and commercial enterprises that create jobs and improve the sustainability of the State’s marine economy and related industries through capital investments. In May 2016, the newly formed Alliance for Maine’s Marine Economy, a consortium of Maine-based marine businesses, research institutions and educational organizations, was selected by the State of Maine as the recipient of the \$7 million in funding and pledged to provide \$9.3 million in matching funds. The Alliance’s plan, spearheaded by the University of Maine, called for immediate infrastructure investments in public and private institutions throughout Maine. The \$7 million award also included \$1.92 million to fund a competitive Marine Jobs Fund Small Capital Grants Program. MTI was asked to administer this competitive process and issued a request for proposals in July 2017. MTI received 39 letters of intent. The Alliance for Maine’s Marine Economy conducted the review and evaluations of the proposals and made recommendations to the MTI Board of Directors. Ultimately, in FY18, the MTI Board of Directors made 10 awards from the Marine Jobs Fund Small Capital Grants program totaling \$1,924,303 (matched by \$6,507,200).

MTAF 2.0

Maine Technology Asset Fund 2.0

IMPACT REPORT

\$46M

Total Funds Awarded

\$1.4B

Economic Impact

5,350

Expected Jobs

About

In June 2017, voters approved the second Maine Technology Asset Fund 2.0 (MTAF2.0) program. The initiative specified that “forty-five million dollars (\$45,000,000) would be distributed by the Maine Technology Institute in the form of grants to support infrastructure, equipment and technology upgrades in the following targeted technology sectors: biotechnology, aquaculture and marine technology, composite materials technology, environmental technology, advanced technologies for forestry and agriculture, information technology, and precision manufacturing technology. Funds were to be awarded to public and private entities in Maine through a competitive process, and recipients were required to match these State dollars with an equivalent amount of federal or private funds.”

MTI solicited proposals in the fall of 2017 and received 183 applications seeking, in aggregate, nearly \$400 million. The proposals flowed in from all 16 Maine counties and represented businesses of all levels of maturity from startups to publicly traded companies. MTI conducted extensive due diligence and ultimately made 18 funding awards in early 2018. MTI augmented the \$45 million in bond funds with an additional \$1,063,836 to further maximize the impact of the awards. In total, MTI awarded \$46,063,836 (matched by \$192,536,123). According to an independent economic impact analysis, the awards will directly result in 5,350 jobs and \$1.4 billion in economic impact over the next 3 years.

Recipient Information

18

Recipients

\$193M

Private Sector Match

7

Targeted Sectors

SUCCESS STORY

”

Almost all of our competitors outsource their manufacturing to Asia. We need to develop the most efficient and effective American-based manufacturing operation we can. Our new CNC cutting machine significantly increases our yields on high-tech fabrics that are 7-15 times more expensive than traditional alternatives.

—Dan St. Pierre, Co-Founder & COO

Hyperlite Mountain Gear

Grant | \$177,760

A young outdoor industry company with high growth, Hyperlite Mountain Gear is challenging the status quo. Manufacturing their products at an 1880's era mill in Biddeford, Hyperlite is competing with entrenched brands producing overseas with lower costs and using lower-tech materials. The company is driven to produce a premium product despite these constraints and prides itself on their minimalist high performance gear. The MTAF2.0 award is allowing Hyperlite to focus on efficiency and automation to accelerate production growth and increase market share.

130 Age of their repurposed mill space

0 Nonessential features in their high performance gear

The Awards



VETS FIRST CHOICE

Location: Portland

Award Amount: \$9,000,000

Total Project Cost: \$20,000,000

Vets First Choice plans to build a new corporate facility on the peninsula in Portland, Maine. This multi-million dollar project will include an automated fulfillment center, state-of-the-art specialty pharmacy, and a world-class science, technology, engineering and math center. This major expansion will create hundreds of high-quality jobs in Maine. Vets First Choice has formed a strategic collaboration with the University of New England College of Pharmacy for residency, training and development programs. Vets First Choice is a leading provider of technology-enabled healthcare services for companion and equine veterinary practitioners. Founded in 2010, the company partners with veterinarians to create insight into gaps in patient care and offers professionalized proactive prescription management to drive client engagement and improve compliance.

JACKSON LABORATORY

Location: Bar Harbor

Award Amount: \$12,500,000

Total Project Cost: \$60,000,000

The Jackson Laboratory (JAX) is constructing a state-of-the-art research mouse production facility in Ellsworth, Maine. The facility will include innovative, automated systems for handling

production materials. These systems will significantly increase production safety and efficiency and enhance product quality and consequently will advance the Laboratory's position as the global leader in research mouse production. JAX has committed \$75 million to phase 1 of the 3-phase project and will match the \$12.5 million grant from MTAF2.0 with an additional \$47.5 million, to complete the project's second phase.

C & L AEROSPACE HOLDINGS, LLC

Location: Bangor

Award Amount: \$2,634,500

Total Project Cost: \$5,669,000

The C&L Aviation Group award will lead to additional on-site manufacturing and aircraft modification. These funds will allow expansion of the current facility and purchase of necessary equipment to support the increased engineering and production efforts. Company revenue is expected to grow 50% over the next three years and new jobs to be generated at the Bangor, Maine headquarters.

GOOD TO-GO LLC

Location: Kittery

Award Amount: \$150,000

Total Project Cost: \$300,000

Creating and manufacturing gourmet dehydrated meals in Maine since 2014, Good To-Go had hit a bottleneck in packaging

their product efficiently. This award is going to build a USDA compliant packaging room housing a semi-automatic filler/bagging machine. This will increase their packaging capacity by 300%, meeting existing consumer demand, increasing sales, and allowing the company to keep growing.

HYPERLITE MOUNTAIN GEAR

Location: Biddeford

Award Amount: \$177,670

Total Project Cost: \$355,341

Hyperlite Mountain Gear, based in Biddeford, is a manufacturer of 100% USA-made ultralight outdoor equipment using high-tech material technologies and designs. The company's MTAF 2.0 award is for a production automation and efficiency project that will help further commercialize manufacturability and market competitiveness of their high-tech, high-quality, high-performance gear line.

ARCAST

Location: Oxford

Award Amount: \$187,500

Total Project Cost: \$500,000

Arcast Inc., based in Oxford Maine, is a relatively young company, but one that has made its mark in the field of metallurgical processing. The company has built an international portfolio of customers for its process equipment, which includes arc-melting systems and inert-gas-atomizers



SMARTLAM



for the production of high purity metal powders. Arcast is now expanding operations into powder production, employing its own technological developments. The MTAF2.0 funding will greatly accelerate that ambition at the cutting edge of manufacturing technology, such as additive layer manufacturing (3D printing).

READY SEAFOOD COMPANY

Location: Saco
Award Amount: \$2,250,000
Total Project Cost: \$6,000,000
 Ready Seafood will be developing a Maine Lobster Full Utilization Campus in order to maximize the value of Maine’s lobster resource by collaborating with Maine’s top lobster scientists. This new facility will create 40 new full-time positions and generate tens of millions of dollars in additional revenue. The campus will include an innovative lobster holding mechanism, a new lobster processing plant, a research lab, a lobster shell dehydration plant and a logistics hub.

SAVILINX

Location: Brunswick
Award Amount: \$95,000
Total Project Cost: \$245,239
 SaviLinx was founded by Maine native Heather Blease in 2013 as a HUBZone Certified, Woman Owned Small Business providing business process outsourcing contact services to the public and

private sectors. The MTAF2.0 grant enables SaviLinx to create an innovative system called the SaviLinx Enterprise Information Management System (“SEIMS”) that will enable the delivery of enhanced professional services providing strategic information and analytics to their clients.

SEA BAGS

Location: Portland
Award Amount: \$1,000,000
Total Project Cost: \$4,000,000
 Sea Bags has been handcrafting totes and accessories from recycled sails on Custom House Wharf in Portland since 1999. The company’s MTAF 2.0 award will be used to develop new precision manufacturing capabilities to build capacity and accelerate growth in customized products, which are already the top seller and competitive differentiator at the company.

SMARTLAM

Location: Site to be determined
Award Amount: \$3,000,000
Total Project Cost: \$22,500,000
 Founded in 2012, SmartLam is the first manufacturer of Cross-Laminated Timber (CLT) in the United States. CLT is an engineered wood building material and sustainable alternative to traditional building materials like steel, concrete and masonry. With demand for CLT growing, SmartLam is expanding

their operations from their Montana base to build a new manufacturing facility in Maine. Site selection for the facility is in progress and will create manufacturing employment opportunities.

VERSO CORPORATION

Location: Jay
Award Amount: \$4,000,000
Total Project Cost: \$17,000,000
 The MTAF2.0 grant has allowed the Verso Androscoggin Mill to do capital upgrades to the shuttered pulp line and No. 3 Paper Machine and allowing this equipment to restart for the manufacture of packaging grades. This increase in production will create approximately 120 full-time jobs at the Androscoggin Mill and additional jobs throughout the Maine forest products supply chain.

BRISTOL SEAFOOD

Location: Portland
Award Amount: \$743,698
Total Project Cost: \$4,859,243
 This grant along with capital committed by the company will support continued growth of Bristol Seafood through better product quality, innovative packaging capabilities, and new verticals. As a result of these investments, the company expects to create over 40 new jobs over the next five years.



120

Expected jobs

450K

Tons of paper to be produced per year

”

The restart of the No. 3 paper machine positions the mill for future success that is expected to benefit loggers and other suppliers in the state, local businesses, and the broader economy in Franklin County and beyond.

Kathi Rowzie,
Vice President,
Communications
and Public Affairs

SUCCESS STORY

Verso Corporation

Grant | \$4,000,000

Founded in 1965, Verso currently has seven mills across the United States, including the Androscoggin Mill in Jay, Maine. In 2017, Verso cut production at the mill, first idling and then closing down the No. 3 paper machine. Both the State of Maine and Verso were interested in finding ways to bring back these jobs and the economy the mill supports in Franklin County and beyond.

The MTAF 2.0 award was able to supplement Verso's investment to upgrade and restart the No. 3 machine. The upgrade will allow Verso to enter the growing global containerboard market. The annual paper production from the mill is expected to almost double, and 120 new jobs to be created.



HUSSEY SEATING

Location: North Berwick
Award Amount: \$2,812,500
Total Project Cost: \$8,200,000
A 6th generation family-owned business founded in 1835, Hussey has operated continuously in North Berwick, Maine for over 182 years, where it currently employs 280 people. The multi-phased innovation project supported by the MTAF2.0 award will have an immediate impact on preservation of market share and job retention, and is ultimately expected to have a significant positive impact on revenue and full-time employment.

J.S. MCCARTHY

Location: Augusta
Award Amount: \$1,500,000
Total Project Cost: \$5,600,000
J.S. McCarthy Printers, headquartered in Augusta, Maine, was awarded \$1.5 Million from the MTAF2.0 Program to assist in the purchase of a Heidelberg printing press as part of a \$6 million investment. J.S. McCarthy and Heidelberg collaborated to develop innovative proprietary technology which will be 50% more productive than the Company's current equipment. The purchase will allow J.S. McCarthy to increase overall capacity to substantially grow sales, creating new jobs in Maine. For over 60 years, J.S. McCarthy has grown to be one of the largest sheetfed printing operations on the East Coast with 230 full-time employees operating 24/7.

DEEPWATER BUOYANCY, INC.

Location: Biddeford
Award Amount: \$187,500
Total Project Cost: \$500,000
DeepWater Buoyancy, Inc. is the world's largest producer of subsea buoyancy products for the oceanographic industry and has a vast line of buoyancy solutions for offshore oil & gas and other marine companies. The MTAF2.0 grant supports a substantial capital investment to upgrade facilities, add equipment, and introduce new processes. The result should be an increase in revenues and the addition of numerous technical, professional and production jobs.

PLEASANT RIVER LUMBER COMPANY

Location: Dover Foxcroft
Award Amount: \$4,226,000
Total Project Cost: \$12,000,000
Pleasant River Lumber is a Maine business employing more than 300 people throughout the State. They will be expanding and modernizing their Dover-Foxcroft facility with the addition of a new planer mill, continuous dry kiln, and high speed small log sawing line. Utilizing the latest technology, they will be able to efficiently process small logs and balsam fir, both of which currently lack sufficient markets in Maine. This will help meet the needs of Maine landowners and also provide by-products for the recovering

paper mill industry and lumber for the growing Cross Laminated Timber markets.

ON SEMICONDUCTOR

Location: South Portland
Award Amount: \$1,000,000
Total Project Cost: \$23,200,000
ON Semiconductor plans to invest \$23.2M of capital for equipment and facilities infrastructure to enable the introduction and volume manufacturing of two new technologies at the South Portland Maine Wafer Fabrication Facility. The introduction of the new technologies will advance factory capability, improve factory utilization and create more than 25 jobs. The \$1 million MTAF2.0 grant will be used to support capital costs.

TILSON

Location: Portland
Award Amount: \$602,737.50
Total Project Cost: \$1,607,300
Tilson is a high-growth, 400 employee technology professionals company headquartered in Portland, Maine. Tilson's project invests in mission critical assets to equip its Portland engineering center of excellence to increase its global competitiveness, reduce cost and add engineering jobs in Maine, by building systems to automate broadband network engineering, ultimately capturing additional market in network design-build projects across the country.



SUCCESS STORY

Jackson Lab

Grant | \$12,500,000

85% of operating budget spent in Maine

28% of new employees move from outside the state

A true Maine success story, Jackson Labs (JAX) was founded almost 90 years ago in Bar Harbor, Maine. In the business of producing lab mice almost as long, JAX has seen demand constantly increase as research expands. Used by researchers in 75 countries and 27,000 laboratories, Jackson mice are the gold standard. Expanding the production facilities in Maine was a priority as the existing facilities were stretched to the breaking point. From a macro viewpoint, JAX was eager to expand the mouse business in Maine, and mill closures were releasing good Maine employees that JAX could take advantage of.

In 2012, JAX was able to purchase the Lowes space in Ellsworth and make plans to create a state of the art mouse vivarium. The MTAF 2.0 grant allowed JAX to accelerate the build out of the Ellsworth facility. While the full build-out will take 8 to 10 years, the new facility will allow JAX to continue hiring and staying on the forefront of mouse production.



JAX has, for decades, worked with the state and MTI. It is a great public-private relationship that has continued to grow the infrastructure of the Jackson Laboratories, along with the program support from federal agencies, philanthropists and other agencies.

LuAnn Ballesteros,
VP External and
Government Affairs

Maine Cancer and Aging Resource Bond

In 2014, the Legislature authorized (Public Law 2014, Chapter 574), and the voters of the State of Maine approved, \$10 million in bond funds to build a research center, to discover genetic solutions for cancer and the diseases of aging, and to promote job growth and private sector investment in Maine. The funds were awarded through a competitive state process to expand the state's research capabilities in the areas of mammalian genetics and murine biometric analytics, make the state a global resource for precision medicine, improve the state's capacity to attract and retain young professionals, and bring additional grant funding, private sector investment, job growth, and economic activity to the state. In July of 2015 (FY16), the Jackson Laboratory in Bar Harbor was announced as the highest scoring bidder and matched its \$10 million award with more than \$11 million in matching funds. The project remains under active management by MTI.

Maine Biomedical Research Bond

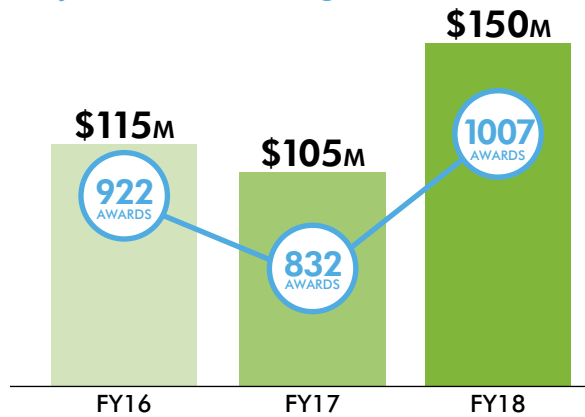
Also in 2014, the Legislature authorized (Public Law 2014, Chapter 568), and the voters of the State of Maine approved, a \$3,000,000 bond issue to modernize and expand infrastructure in a biological laboratory specializing in tissue repair and regeneration located in the state. The funds were awarded through a competitive process to modernize and expand infrastructure in a biological laboratory specializing in tissue repair and regeneration located in the state, in order to increase biotechnology workforce training, retain and recruit to the state multiple biomedical research and development groups and create a drug discovery and development facility that will improve human health and stimulate biotechnology job growth and economic activity. In July of 2015 (FY16), the Mount Desert Island Biological Laboratory was announced as the highest scoring bidder and matched its \$3 million award with

more than \$5.7 million in matching funds. The project remains under active management by MTI.

Maine Technology Asset Fund

MTI also administers the Maine Technology Asset Fund (MTAF), a competitive bond-funded program providing investments for facilities construction, renovation, and equipment, which advance emerging technologies on the research, development and commercialization path to help Maine companies, university centers and non-profit research institutions secure further investment. MTAF was first approved by the Maine Legislature and the state's voters in 2007 and capitalized with \$50 million in bond funding focused on increasing research and development (R&D) facilities and resources in our state's seven targeted technology sectors. Those monies were mostly disbursed in funding rounds in 2008, 2009 and 2010. The Legislature and voters approved an additional MTAF funding bill in the amount of \$3 million in 2009. MTI received the \$3M in MTAF funds in FY15. Those funds, including approximately \$900,000 not awarded from earlier rounds and augmented by another \$921,871 in MTI funding, were used to issue 8 new MTAF awards totaling approximately \$4.9 million and matched by \$12 million. While the funding awards were made in FY15, the projects are still under active MTI management.

Funds Under Management Projects Under Management



Other MTI Programs Of Assistance

E-Resident Program

MTI employs an E-Resident program to provide portfolio firms with direct access to experienced entrepreneurs who have taken big risks, founded companies, raised capital, and created jobs. One of the most powerful tools one can provide to start-ups or less experienced teams is access to network contacts and mentors to offer advice and support from experienced entrepreneurs. MTI's E-Resident program is intended, like other MTI programs, to improve the competitive position of Maine's technology-intensive sectors and ultimately lead to business growth and jobs for Maine people.



SUCCESS STORY

CourseStorm

Loan | Award: \$99,582

” MTI has been instrumental in helping us grow the company—the connections, the encouragement and the mentoring has been a huge benefit. I tell a lot of people about MTI. —Brian Rahill, CEO

CourseStorm is an exciting software startup based in Orono, offering a turnkey, online registration and marketing system built specifically for noncredit education organizations to list their classes online and process registration and payments. CourseStorm has seen excellent traction in the small to medium sized education market but needed additional product investment to scale the software to continue their fast-paced growth.

A Development Loan from MTI helped CourseStorm develop their product for new markets and automate processes to improve efficiency. MTI's funding has also helped CourseStorm attract significant outside investment from out-of-state investors and angel investors. Taken together, CourseStorm has hired more people—often recent University of Maine system graduates—for quality, technical jobs. These are the types of jobs that keep young people in the state and make for a vibrant entrepreneurial community in the Bangor region.

60K

People who have used CourseStorm to register for a class

The SBIR/STTR Technical Assistance Program

The SBIR/STTR Technical Assistance Program fulfills MTI's statutory mandate that it operate a program that provides technical assistance to Maine small businesses to help them develop competitive Small Business Innovation Research (SBIR) and Small Business Technical Transfer (STTR) proposals for submission to federal agencies participating in the SBIR/STTR programs. MTI provides advice on how best to fashion a competitive application for the estimated \$2.5 billion that is available each year from the eleven federal agencies that participate in the SBIR/STTR programs. The size of the individual federal grants can range from under \$100,000 to \$1 million. In FY18, with assistance from MTI, Maine businesses received over \$4 million in SBIR/STTR awards.



SUCCESS STORY

Montalvo

Grant | \$5,000

” Know your market as well as you know your technology. One of the common reasons companies fall short is they are focused too much on the technology and not nearly enough on the market.

—Robin Goodwin, CEO

Montalvo, of Gorham, specializes in manufacturing superior web control products and offering complete web control services and support. They have received both a Phase I and a Phase II award from the National Science Foundation. The Phase I grant cut a potential 4-year development window in half and gave them the ability to make process changes, connect with potential customers, and raise their visibility for future partners. The Phase II grant, which is focused on commercialization, allowed Montalvo to invest in capital improvements and develop prototypes to show to customers.

\$225,000

National Science Foundation Phase I grant

\$748,000

National Science Foundation Phase II grant

Partnerships To Promote Maine's Innovation Economy

In addition to direct support of innovators, MTI also supports programs and infrastructure that encourage innovation. Under its governing statute, MTI is instructed to cooperate with the Maine Department of Economic & Community Development (DECD), Manufacturing Extension Partnership (MEP), University of Maine (UMaine), and others to ensure a complementary system of support services is available to companies and research laboratories.

To foster this complementary system of support services, MTI works collaboratively with organizations across Maine to support programs and initiatives designed to assist entrepreneurs and small businesses and to promote and celebrate Maine's culture of ingenuity and its vibrant startup community. One of MTI's most celebrated collaborations is with Maine Accelerates Growth (MxG).

MxG helps accelerate the growth of companies, communities, and talent by funding, creating, and leveraging high impact entrepreneurship and innovation programs and events through a collaborative and complementary network of organizations and individuals propelling prosperity across Maine. Recognizing that it takes an amazing amount of work, skilled employees, training, education, capital, and luck to build a company that makes a positive contribution to its stakeholders and the economy, MTI originally seeded this effort with a \$200,000 challenge grant, matching contributions to MxG on a one-to-one basis.

MxG has created events and programs to grow Maine's innovation community and has been supported all over our State, with thousands of people participating in those events and programs.

Active MTI Collaborations, Affiliations and Partnerships



Here are just some of the programs, events and organizations that have received support:

Our Katahdin
(Millinocket & Medway)

Engine Biddeford
(Biddeford)

Big Gig (Orono & Bangor)

StartUp Maine (Portland)

Midcoast Magnet (Rockland)

Top Gun (Lewiston-Auburn,
Bangor, Midcoast and
Portland)

Maine Wood Innovator's
Conference (Hiram)

Greenlight Maine

Maine House of Genius

Innovate for Maine Fellows
Internship Program

TEDxDirigo

SUCCESS STORY

Maine Science Festival

Event Sponsorship | \$8,000

40K Attendees

70 Events



” Having MTI as a sponsor is like having a validation that we’re doing something innovative and meeting their mission.

—Kate Dickerson, Founder & Director

The Maine Science Festival (MSF) is an independently funded program of the Maine Discovery Museum. The MSF weekend, launched in 2015, is a celebration and exploration of Maine science, engineering, technology and innovation. Through sponsorships, almost all weekend events are available free-of-charge to ensure that learning about and celebrating Maine science, research and innovation is available to all Mainers.

The goal of the MSF is for attendees to leave amazed and delighted at the impact science is having in Maine. The MSF seeks to celebrate what’s happening in Maine and to educate Mainers that you don’t have to leave the state to be a part of groundbreaking, innovative work happening here. In the past four years, MSF mission has reached over 40,000 attendees.

Beyond the financial sponsorship, the MSF event organizers leverage MTI connections and network for event programming, ideas and content.

Looking Ahead

The new MTI Investment Process will be more fluid than before. Clients may apply for funds at any time and we no longer have fixed programs with specific deadlines. Our goal is to provide more tailored support, more customer-centric service, and to maximize MTI's impact in Maine.



INITIAL CONTACT

No matter how a client comes to MTI, they will be asked to complete MTI's new online intake form first. Within a week, an MTI staff member will schedule an initial meeting. This staff member will serve as the client's advisor and primary contact going forward.



MEETING

During the initial meeting, the advisor will learn about their goals and conduct a VIRAL[®] assessment. This tool is a way to measure the maturity of an organization or business across eight different areas including the development of the product, team, business model, scalability, value proposition and market size.

Our goal is to advise on what types of work are likely to be approved and how much MTI funding they are likely to qualify for. If the client is not a good match for MTI right now, we may refer them to one of our partner organizations.



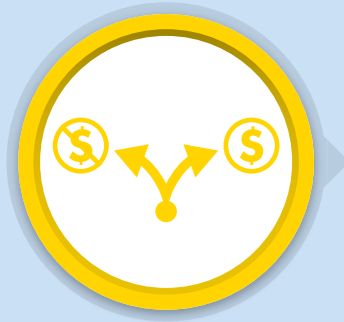
APPLICATION

MTI has gotten rid of application deadlines. Clients may complete MTI's online application on their own schedule and they may save the application and come back to it later. The application is a mix of written questions and data about the innovation, company, and goals for the business.

The New MTI Investment Process

In Fiscal Year 2019, MTI anticipates playing a leading role in many noteworthy innovation and research and development initiatives.

The organization will continue its efforts to operationalize its strategic plan by launching a new funding approach to catalyze innovation in Maine.



REVIEW

MTI's review timeline is fluid and depends on the amount of funding requested, but is generally 2 to 9 weeks. The review includes an evaluation of the technology, market, team financials, and projected Maine impact.

FUNDING DECISION

The applicant's MTI advisor will contact them with a funding decision and any conditions associated with it. The contract package will be prepared and emailed to them for review and signature.

If MTI decides against funding a project, applicants will receive feedback regarding why the application was not approved. They may be able to reapply once specific factors have been addressed. Applicants may also be referred to other programs or partners that would be a better fit for the project than MTI.

REPORTING AND ONGOING SUPPORT

MTI will reach out to awardees on a quarterly basis to review progress. For larger projects, milestone reports may be required from awardees for each scheduled distribution of MTI funds (based on the original application). For all funded projects, a final report is required to confirm achievement of the original proposed Scope of Work. In addition, all MTI clients will be required to submit annual impact reports via our online portal for 3 years post-award.



MTI is committed to serving the wide-ranging innovation needs of Maine businesses and entrepreneurs. MTI plans to continue as a leading-edge organization known throughout Maine as the driving force behind our state's thriving private-sector innovation economy. MTI is pleased to play a pivotal role in helping to bolster and support Maine's innovation economy and looks forward to building on past commitments and launching new initiatives to help build a more robust economic climate across the State of Maine.

Maine Technology Institute
8 Venture Avenue, Brunswick, Maine 04011
Telephone: (207) 582-4790
www.MaineTechnology.org