



The Blue Sky Project

Reaffirming Public Higher Education
at Maine's Flagship University

Strategic Plan Assessment

Pathway 1

Serving Our State: Catalyzing Maine's Revitalization

October 4, 2017

Jake Ward, VP for Innovation &
Economic Development

Pathway 1 Team



1.

Jake Ward (Chair)

VP for Innovation & Economic Development

Ivan Manev

Dean, Maine Business School

Todd Gabe

Professor, School of Economics

Jason Bolton

Associate Extension Professor

Jason Charland

Director of Grant Development

Heather Leslie

Director of Darling Marine Center

Philip Hamilton

BOV Member

PATHWAY

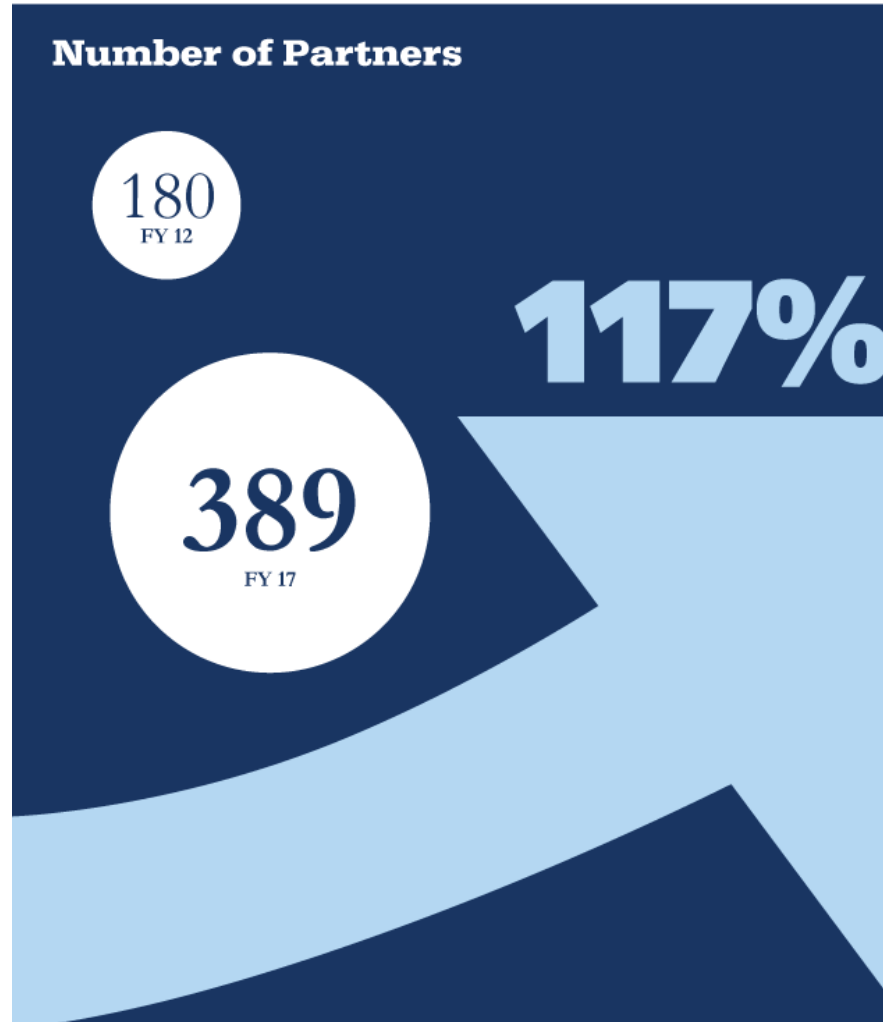
Pathway 1 Initiative

Enhance our impact on the economic and social fabric of Maine



1.

Growth in Private Sector Partnerships – formal contracts



PATHWAY

Pathway 1 Accomplishments

Continue to match and more closely align UMaine research strengths



1.

PATHWAY

Research Reinvestment Fund

- Strengthen research and development activities that are tied to Maine businesses and to industries that are critical to the future of Maine.
- FY14-FY19, \$2.1M/year – planning grants, seed grants, student grants

Maine Economic Improvement Fund (MEIF)

- FY 2016/2017 increase in state funding for UM MEIF by \$1.8M/year

Grants and Contracts Awarded in MEIF Sectors	FY13 MEIF Awards	FY14 MEIF Awards	FY15 MEIF Awards	FY16 MEIF Awards
Forestry and Agriculture	\$8,642,424	\$7,654,060	\$14,194,009	\$10,317,799
Aquaculture and Marine	7,045,322	9,153,389	15,187,566	12,631,690
Biotechnology	1,985,295	6,353,450	1,524,204	2,399,487
Composites	9,230,715	5,135,033	5,247,712	6,974,264
Environmental	5,781,658	7,959,264	4,349,651	5,045,536
Information Tech	7,422,675	2,520,521	4,473,781	11,497,199
Precision Manufacturing	1,130,746	1,414,700	780,694	1,009,921
Cross Sector	2,290,129	4,681,209	1,018,132	507,842
Total	\$43,528,964	\$44,871,626	\$46,775,749	\$50,383,738

FY16 Dollar Increase \$3,607,989

FY16 Percentage Increase 7.71%

Pathway 1 Accomplishments

Continue to match and more closely align UMaine research strengths



1.

*Seven Maine Technology Sectors for Economic Development:
Success Stories*

Advanced Technologies for Forest and Agriculture

- Economic Development Assessment Team (EDAT) Fy16-17
 - **Maine Forest Economy Growth Initiative**
 - **Roadmap, market analysis, emerging technologies, re-utilization**
 - **21 Member steering committee** - private/non-profit/state
 - Over \$2M federal grant support
 - UMaine School of Forest Resources, FBRI, ASCC, OIED

Aquaculture and Marine

- Alliance for Maine's Marine Economy \$7M Marine Bond
 - UMaine Darling Marine Center/Maine Sea Grant
 - 20+ private/non-profit/state members
 - \$3M in DMC improvements

PATHWAY

Pathway 1 Accomplishments

Align technology and education programs with Maine's economic development needs.



1.

Innovate for Maine Fellows Program – Paid Internships

- **162 Fellows** representing **29 colleges and universities** with **168 businesses** over the course of the program

Flagship Internship Program – Paid Internships

- Piloted in Spring 2017, a total of **19 UMaine students** and **17 organizations** were certified

The Maine Center for Research in STEM Education (RiSE Center)

- In 2014 awards bringing over **\$10 million** to the University of Maine
- In 2016, **\$2 million** National Science Foundation grant to promote STEM education in rural schools

Pathway 1 Accomplishments

Reaffirm and integrate the core goals of a liberal arts education in community/culture with innovation and economic development.



1.

Clement and Linda McGillicuddy Humanities Center

Three-year, \$300,000 grant from the Presidential Request for Visions of University Excellence (PRE-VUE) Program

The Center's principal objectives are to:

- Establish partnerships with arts and humanities institutions in Maine
- Encourage collaborations between UMaine faculty and Maine's K-12 teachers and students
- Share UMaine's unique resources with the people of Maine
- Strengthen the humanities at the University by
 - Creating opportunities for students to engage in humanities education and research
 - Developing innovative programming
 - Supporting humanities scholarship and interdisciplinary collaborations

Pathway 1 Accomplishments

Prepare UMaine graduates for Maine's future workplace needs.



1.

Growing Maine's Workforce

- Flagship Match
 - Attracted **38% more out-of-state students** for Fall 2016 semester

Internships & Fellowships

- Maine Business School's new internship office has collaborations with nearly 90 employers.
- CSD is the only program preparing Speech-Language Pathologists in Maine. Within six months of graduation, 100 percent of CSD graduates found employment in the field.

Career Services

- Continues to host career center and college specific fairs, events, and workshops - connecting students and employers throughout the state.

Innovation Engineering

- New "Fundamentals" course – highly interdisciplinary – broad cross-section of majors – work ready skills

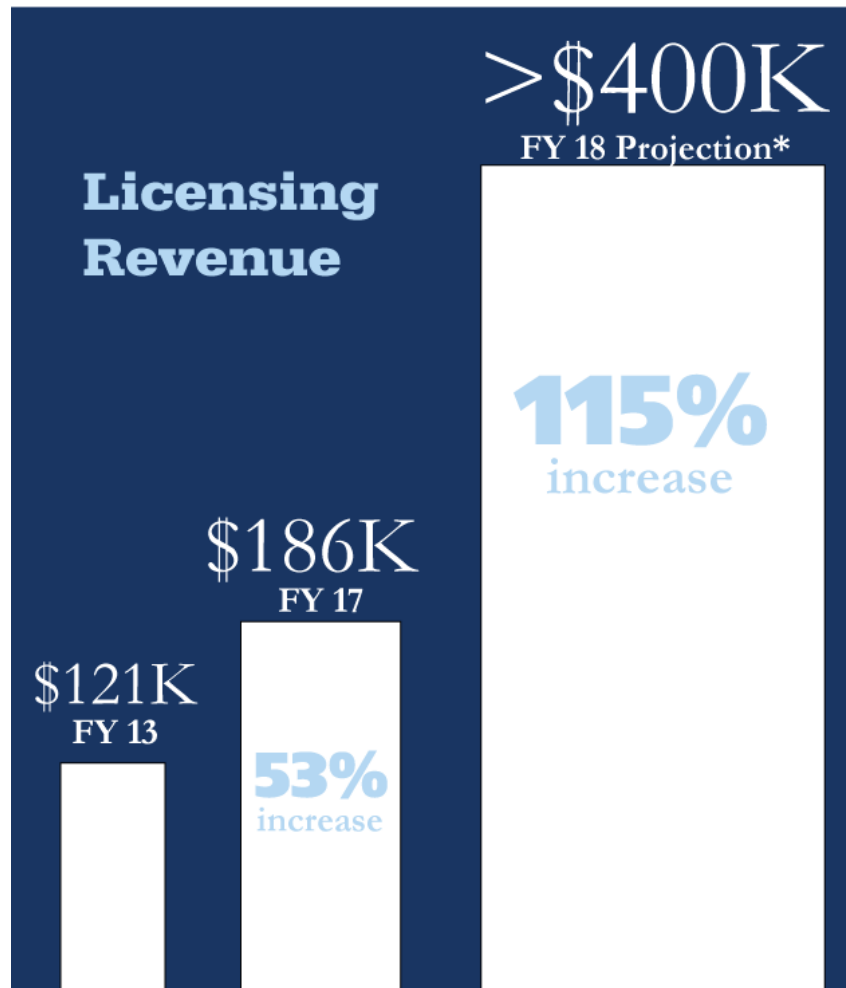
Pathway 1 Accomplishments

Increase commercialization and number of small businesses developed as a result of technology spin-offs.



1.

Commercialization Efforts



*Licenses pending closure with terms

Pathway 1 Accomplishments



Increase commercialization and number of small businesses developed as a result of technology spin-offs.

1.

Statewide Business Incubation & Spin-Off Companies

CCAR

- *Sea & Reef Aquaculture Ocean Resources*
Aqua Vida
- *Springtide Seaweed Applied Ponics*

Upstart Center for Entrepreneurship

- *Cerahelix*
- *Environetix*
- *Double Blue Sports Analytics*
- *Advanced Infrastructure Technologies*
- *Eagre Games.*

Darling Marine Center

- *American Unagi*
- *Maine Fresh Sea Farms*
- *Field Phyto Nutrients*
- *Maine Shellfish Developers*

5 incubators

25 companies

Center for Cooperative Aquaculture
Research

Darling Marine Center

Foster Center for Student Innovation

Union River Center for Innovation

UpStart Center for Entrepreneurship

FY17
UPSTART
CENTER FOR ENTREPRENEURSHIP

69 entrepreneurs
coached

7 tenant
companies

13 new jobs
created

\$2.5M

PATHWAY

Pathway 1 Accomplishments

Enhance UMaine organizational support for promoting regional economic impact.



1.

In 2012, established Office of Innovation and Economic Development

- Department of Industrial, Cooperation
- Foster Center for Student Innovation
- Economic Development Programs,
- Technology Commercialization
- business incubation through the Center for Cooperative Aquaculture Research and the Upstart Center for Entrepreneurship.

Elevated leadership of Office of Innovation and Economic Development to cabinet level vice president position

Created University of Maine Research Foundation

Pathway 1 Accomplishments

Use our resources to highlight Maine's rich cultural heritage, and relate arts and humanities better to economic development.



1.

Collins Center for the Arts

Maine International Conference on the Arts, which provided resources and training for artists, arts administrators, arts educators and community leaders, and included over 30 professional development sessions, artist showcases and a nationally recognized keynote presenter.

UMaine Museum of Art

Expanded its downtown Bangor location to now include 3,800 works. Partners with Maine museums and art programs/camps to provide support to art and humanities development throughout the state.

PATHWAY

Pathway 1 Accomplishments

Continue to increase support for signature strength areas.



1.

Through transparent, engaged process identified UMaine's signature and emerging areas

Signature areas: identified by their strengths in research and education – 12 new faculty positions FY16-FY18

- Forestry and the Environment
- Marine Sciences
- College of Engineering
- Advanced Materials for Infrastructure and Energy
- Climate Change
- STEM Education
- Honors College.

Pathway 1 Accomplishments

Identify, promote and invest in key emerging growth areas.



1.

Emerging Areas represent those programs that may have not yet achieved critical mass or reputation, but have begun to capitalize on interdisciplinary collaboration; have a track record of success with external support from a variety of sources; and involve integration of the research, teaching and service missions.

Emerging areas: – 8 new faculty positions FY16-FY18

- Graduate School of Biomedical Science and Engineering
- Northeastern Americas
- Humanities Research and Education
- Data Science and Engineering
- Sustainability Solutions and Technologies
- Aging Research
- Finance Education

Format for Forums



At the Forum

- Review Initiatives and Accomplishments
- Discussion / Questions

- What else has been accomplished related to this Pathway?

- Are these initiatives still relevant?

- Considering the Pathway's broad goals, how else might this work be advanced?



After the Forum

- Web-based input available
- Recording available