



## Award Abstract # 2241675

### Planning: Maine EPSCoR RII Track-1 Planning Grant

**NSF Org:** [OIA](#)  
[OIA-Office of Integrative Activities](#)

**Recipient:** UNIVERSITY OF MAINE SYSTEM

**Initial Amendment Date:** February 6, 2023

**Latest Amendment Date:** February 6, 2023

**Award Number:** 2241675

**Award Instrument:** Standard Grant

**Program Manager:** Jeanne Small  
jsmall@nsf.gov (703)292-8623  
OIA OIA-Office of Integrative Activities  
O/D Office Of The Director

**Start Date:** February 15, 2023

**End Date:** January 31, 2024 (Estimated)

**Total Intended Award Amount:** \$100,000.00

**Total Awarded Amount to Date:** \$100,000.00

**Funds Obligated to Date:** FY 2023 = \$100,000.00

**History of Investigator:** Aaron Weiskittel (Principal Investigator)  
aaron.weiskittel@maine.edu  
Brian Whitney (Co-Principal Investigator)  
Shane Moeykens (Co-Principal Investigator)  
Sandra De Urioste-Stone (Co-Principal Investigator)  
Khodadad Varahramyan (Co-Principal Investigator)

**Recipient Sponsored Research Office:** University of Maine  
5717 CORBETT HALL  
ORONO  
ME US 04469-5717  
(207)581-1484

**Sponsor Congressional District:** 02

**Primary Place of Performance:** University of Maine  
5717 CORBETT HALL RM 422

ORONO  
ME US 04469-5717

**Primary Place of Performance Congressional District:** 02

**Unique Entity Identifier (UEI):** PB3AJE5ZEJ59

**Parent UEI:**

**NSF Program(s):** EPSCoR RII Track-1

**Primary Program Source:** 01002324DB NSF RESEARCH & RELATED ACTIVIT

**Program Reference Code(s):** 9150

**Program Element Code(s):** 193Y00

**Award Agency Code:** 4900

**Fund Agency Code:** 4900

**Assistance Listing Number(s):** 47.083

## ABSTRACT

Over a one-year period, this planning grant will focus on addressing five objectives to mature a selected project concept and research team, using a collaborative, inclusive approach. The planning grant objectives are: (1) network assessment and mobilization, focusing on the human and organizational network in Maine; (2) strategic planning and gap analysis; (3) economic assessment, including workforce and commercialization analyses; (4) workforce development planning, including the determination of baseline demographics within Maine; and, (5) development of key strategic documents and events, including an implementation plan for the future five-year project and a detailed project logic model. Key activities to achieve these objectives will occur on a 12-month timeline that features three major statewide events focused sequentially on listening, strategic planning, and synthesis.

This planning project from the University of Maine has the potential to develop the intrastate teamwork needed for a future EPSCoR Research Infrastructure Improvement Track-1 proposal on the topic of "Future Opportunities for Decarbonization with Climate-Smart Renewable Resources in Maine's Emerging Green Economy (Maine-FORRE)." This topic is properly aligned with Maine's state Science & Technology plan, which identifies "Maine's forests and their associated products as a unique opportunity for the state, given interests in decarbonization, renewable materials, and natural climate solutions upon which Maine-FORRE will capitalize and expand." Maine-FORRE plans to strategically unify several existing University of Maine research centers (i.e., Advanced Structures and Composites Center, Center for Research on Sustainable Forests, Center for Research in STEM Education, Forest Bioproducts Research Institute, Margaret Chase Smith Policy Center, Process Development Center, and Senator George J. Mitchell Center for Sustainability Solutions). The planning proposal will foster linkages among the existing centers, and allow additional linkages to other partners, both internal and external to Maine, particularly Federal national laboratories.

This award reflects NSF's statutory mission and has been deemed worthy of support through evaluation using the Foundation's intellectual merit and broader impacts review criteria.

## PROJECT OUTCOMES REPORT

### Disclaimer

This Project Outcomes Report for the General Public is displayed verbatim as submitted by the Principal Investigator (PI) for this award. Any opinions, findings, and conclusions or recommendations expressed in this Report are those of the PI and do not necessarily reflect the views of the National Science Foundation; NSF has not approved or endorsed its content.

The NSF EPSCoR RII Track-1 planning grant was developed and submitted by Dr. Aaron Weiskittel and awarded by NSF in November 2023. The planning grant sought to: (1) utilize team science strategies to ensure the successful integration of convergent expertise across various career stages and backgrounds; (2) complete a network collaboration assessment and convening to ensure effective leadership and involvement of key personnel across different backgrounds, expertise, and organizations, as well as possibly catalyze new collaborations; (3) start the development of key strategic materials, including a project logic model to ensure optimization of research and capacity-building efforts, which identify and address potential barriers; (4) help broaden participation of individuals or organizations currently underserved and/or underrepresented in NSF's award portfolio by identifying key strategic partners and inclusion strategies; and (5) identify current economic and workforce conditions throughout the state; and (6) identify specific actions and steps to ensure success during the project implementation stage. A primary outcome of the planning grant was the convening of an external stakeholder network and prioritization of current capacity gaps in Maine for the forest sector. The stakeholders identified gaps they saw in research and workforce capacity (e.g., skills and staffing), while they also described solutions they and their peers were undertaking. Key priority areas were open data availability, AI, economic development, diversity/equity/inclusion, and improved learning.

Additional stakeholder meetings on specific topics were convened with key organizations. First, a diverse group of educators and professionals from across the state of Maine gathered at the University of Maine's Portland Gateway in June 2023 to discuss the field of AI technology and the related areas of data science and informatics. These topics were interwoven with the future of Maine's natural forest resources and the industries that have developed around them. A report summarized the focused discussions on the obstacles Maine's companies are facing in recruiting high-tech employees with appropriate skills; possibilities of capitalizing on the opportunities provided by Maine's natural resources; steps needed to build a resilient, innovation-based economy; and how AI offers promise to address many of the challenges. The report also introduced the Maine-Forest plan, currently under development by researchers at the University of Maine. The plan represents a statewide effort to bring together different organizations to work on the complex issues of developing the state's workforce in AI, data science and related informatics

skillsets, and bridging the state's forest industry away from a declining paper manufacturing emphasis to emerging new opportunities.

Second, members of the University of Maine's EPSCoR team were invited to attend a meeting of the Forest Opportunity Roadmap / Maine (FOR/Maine; <https://formaine.org/>) Executive Council in Augusta, ME on July 10, 2023. FOR/Maine is a collaborative organization that brings together representatives from the forestry industry, state and local governments, schools, and non-profits to plan for the future of Maine's forest economy. The Executive Council includes representatives from each of the aforementioned sectors who work together to help lay the roadmap for Maine's forestry future. The EPSCoR team was invited to discuss the opportunities that the new National Science Foundation (NSF) programs relevant for research and development in the forestry sector. After the council was updated on Maine's most recent legislative session, the results of a recent collaborative trip to Finland, and activities and prospective opportunities that fell under committee business, Shane Moeykens, Aaron Weiskittel, and Beth Campbell briefed the council. Members were provided information on the state's Science & Technology plan and the future of NSF programming and asked for feedback and opportunities to collaborate to work towards a successful proposal. Metrics were proposed to measure the state's research capacity included the number of faculty, percentage of research personnel, number of degree programs, number of research centers, and the percentage of funding dedicated to research in the forestry industry. Feedback from the council suggested that the state should be looking to compare itself not to regional competitors but to states with larger, more developed forestry sectors. Educational components for the Maine-Forest programs were also discussed, including building skills in the forestry sector among K-16 students as well as adult professionals. This education would include introducing indigenous knowledge into university-level science education, the expansion of a forest ecology research network, and learning opportunities for Maine's educators. The programs will be looking to pull the industry together under one umbrella, enabling connections and communications across the sector on important discussions such as the importance of research in fields like AI, much like FOR/Maine has accomplished for the business sector of the industry, for research and development.

In short, the Maine EPSCoR RII Track-1 Planning Grant allowed the necessary strategic planning to assess current opportunities within the state as it relates to the forest sector and align key partnerships to build future programming needed to reimagine the sector.

Last Modified: 08/08/2023  
Modified by: Aaron Weiskittel

Please report errors in award information by writing to: [awardsearch@nsf.gov](mailto:awardsearch@nsf.gov).

Feedback

[Top](#)



2415 Eisenhower Ave  
Alexandria, VA 22314  
(703) 292-5111

[Sign up for email updates](#)

---

## About Us

- [About NSF](#)
- [Careers](#)
- [Our Directorates & Offices](#)
- [National Science Board](#)
- [Contact Us](#)

## What's New

- [News & Announcements](#)
- [Events](#)
- [Science Matters Blog](#)
- [Multimedia Gallery](#)

## Information For

- [Funding Seekers](#)
- [NSF Awardees](#)

Feedback

[Congress](#)

[Media](#)

[Educators](#)

[Panelists](#)

**Resources**

[Documents & Reports](#)

[Budget, Performance & Financial Reporting](#)

[Public Access](#)

[Stopping Harassment](#)

[Research Security](#)

[Scientific Integrity](#)

[Research.gov](#)

[Vulnerability disclosure](#) [Inspector General](#) [Privacy](#) [FOIA](#) [No FEAR Act](#) [USA.gov](#) [Accessibility](#) [Plain language](#)

Feedback