Advanced Manufacturing Talent Roadmap RFP

The Maine Technology Institute (MTI), in partnership with the Maine Department of Labor and Manufacturers Association of Maine, is seeking a consulting firm to conduct research on Maine's advanced manufacturing sector workforce, with a focus on forest bioproducts, as part of the state's Tech Hub designation. Per the following proposed scope of work, the research will assess Maine's employment demand and associated gaps for key occupations, skill requirements, training opportunities, job quality, and challenges that employers, prospective employees, and incumbent workers face. The end result will be a talent roadmap, produced by the end of 2024, that identifies future-facing priorities for manufacturing sector workforce development initiatives, encompassing both heritage and advanced manufacturing, and developed in alignment with related ongoing assessments.

In response to this RFP, MTI seeks detailed yet succinct responses that demonstrate bidder's qualifications, experience, and ability to execute the proposed scope of work. In no more than 5 pages, bidders should provide:

- An **organizational overview** that describes their qualifications and skills to provide the requested services, including relevant expertise in labor market information analysis, workforce development strategies, and the manufacturing sector. This overview should also include names, titles, and bios of key personnel that would be executing the project. If subcontractors are to be used, bidders must provide the subcontractor's name and a brief description of their capacity and qualifications.
- A **proposed project design** for executing the scope of work. Give particular attention to describing the methods and resources you will use and how you will accomplish the tasks involved.
- A **realistic work plan** that outlines key milestones, deliverables, and intended outcomes.
- A **budget proposal** that encompasses the costs necessary for the bidder to fully execute the scope of work by the end of 2024. We anticipate the period of performance for this work to be May 2024 – December 2024.
- At least **three examples** of recent projects which demonstrate their experience and expertise in performing services relevant to the scope of work, as well as highlighting the bidder's stated qualifications and skills.
- **Three references** that can speak to the bidder's experience in executing similar scopes of work.

Proposals are due by May 24, 2024. Bidders should submit proposals and any questions to bwhitney@mainetechnology.org.

Proposals will be evaluated by a team made up of MTI staff and an external advisory committee. Factors to be considered in evaluating proposals include relevant experience and ability; the written proposal; feedback from references; and cost.

Phase 1: Workforce Assessment

Components

1. Gap analysis of existing labor supply and projected labor demand for advanced manufacturing occupations.

Leveraging labor market data available through government (e.g. Bureau of Labor Statistics) and private sources (e.g. Lightcast) as needed, this would include analysis of current labor supply, historical growth

trends, location quotients (relative regional concentration), demographics, educational attainment, relevant skills, and projected demand and replacement needs for the advanced manufacturing sector writ-large and subsectors within – with an explicit focus on the advanced manufacturing of forest bioproducts. Quantify gaps between labor market demand and workforce supply over at least a 5-year window for key occupations – particularly related to skill needs and talent availabilities – quantifying how much of the gaps can be filled by the state's labor supply and how much will need to be filled from outside the state. The gap analysis will reflect a range of labor demand needs, based on sector development scenarios.

2. Advanced manufacturing training and workforce program inventory of Maine.
The inventory will cover 1) career exploration and navigation activities 2) industry-recognized credential offerings from universities, community colleges, career and technical education schools, and adult education 3) dual enrollment courses offered 4) work-based learning opportunities (i.e. certified pre-apprenticeship, registered apprenticeship programs) and will be used to inform potential gaps in employer certification and education needs compared to what is currently being supplied by the state's training providers.

3. Survey of at least 50 Maine-based employers.
The survey will cover workforce needs, including labor demand and availability for key occupations; certification requirements; emerging and declining skills and occupations needed due to advancements in manufacturing technologies and processes; and other workforce challenges. The Manufacturers Association of Maine will provide employer contact information for this outreach.

4. Stakeholder interviews with advanced manufacturing firms and relevant labor unions.
Complementing the quantitative survey element, conduct 20-30 interviews with advanced manufacturing employers and labor unions, assessing the: recognition and valuation of credentials offered in the state or remotely (e.g. Smart Automation Certification Alliance credentials); perception of curriculum gaps within the state's offerings; awareness of public supports available to the sector (e.g. Competitive Skills Scholarship Program); appetite for leveraging and scaling apprenticeship to fill emerging advanced manufacturing occupations; opportunities for advancing job quality in the sector; and employer propensity for upskilling their workforce and preferred offerings for doing so.

5. Survey of current and potential future workers.
The current worker survey (n=400) will supplement findings from the employer needs assessment by identifying the career pathway attributes of a typical advanced manufacturing worker. The survey will detail educational attainment, specific certifications, experience, hands-on training, mentorship, apprenticeships, or other tools that have supported advanced manufacturing workers in their career pathways. The survey will also assess the job quality of advanced manufacturing careers in Maine, including compensation, benefits, scheduling flexibility, satisfaction, union participation, and advancement opportunities. In addition to the current worker survey, a potential worker survey (n=200) will provide insight on the general perceptions of and interest in advanced manufacturing jobs; the experience of those underrepresented in the sector; and the most important factors that determine interest in a career in the sector, such as the job quality characteristics listed previously. The survey will also include possible barriers to entry, including but not limited to career awareness, education and training, work experience, or financial barriers. Complementing the voice of workers, a survey of people who assist youth and adults with career preparation and exploration (n=30) will assess general perceptions of the advanced manufacturing sector and likelihood to guide people toward it, knowledge

of relevant training programs and career pathways, and perceived determinants in whether people ultimately pursue a career in advanced manufacturing.

Phase 2: Talent Roadmap

Components

1. Strategic priorities for advanced manufacturing workforce development in Maine.
Drawing from the workforce assessment, develop a talent roadmap in close collaboration with the Manufacturers Association of Maine, Maine Department of Labor, and other workforce partners, identifying: tailored best practices and funding opportunities; key recommendations for meeting employer talent needs and enhancing access and job quality in the sector; and priorities based on impact, cost, and ease of implementation.

2. Education and career pathways for key advanced manufacturing occupations.
Building off the Wisconsin career academy model, identify and categorize education and career pathways for 4-6 of the highest priority occupations, developed through facilitated sessions with the Manufacturers Association of Maine, Maine Department of Labor, and other workforce partners. Pathways identified should include relevant skills and education needed and be mapped to the training inventory in the state where available, including career exploration programs, educational institutions, and work-based learning experiences.

3. Support the rollout of the roadmap through stakeholder communication and convenings.
Engage with stakeholders and other key decisionmakers involved in economic and workforce development in Maine to share key findings of the workforce assessment and talent roadmap.