

April 24, 2023

Joint Standing Committee on Appropriations & Financial Affairs
c/o Office of Fiscal & Program Review
5 State House Station
Augusta, ME 04333

RE: LD 416, An Act to Authorize a General Fund Bond Issue for Research and Development and Commercialization

Dear Senator Rotundo, Representative Sachs, and esteemed members of the Committee:

We are writing to convey information related to LD 416, “An Act to Authorize a General Fund Bond Issue for Research and Development and Commercialization.”

As you know, the bill proposes to allocate \$100 million in bond funding “for Maine-based public and private institutions” to stimulate innovation in our state’s seven targeted technology sectors.

Maine’s 10-year Economic Development Strategy calls for the promotion of innovation to increase private sector R&D investment and R&D expenditures in higher education, which then offer profitable opportunities to feed into Maine’s entrepreneurship and small business programs.

The legislation before you references the soon-to-be-released Five-Year Innovation Action plan that has been developed by the Maine Innovation Economy Advisory Board pursuant to MRSA Title 10 §949. Of the five innovation economy goals outlined in the plan, three of them directly relate to the objectives of LD 416:

- ***Goal 1: Increase R&D to 3% of GDP while Focusing on Activities that Directly Support Maine Industries***
- ***Goal 2: Strengthen Pathways to Successful Commercialization, and***
- ***Goal 5: Strengthen Maine’s R&D Framework by, among other things, developing a clear schedule and strategy for biennial R&D bonding and State R&D Appropriations.***

The Innovation Action Plan also cites other reports and studies that demonstrate the impact associated with R&D investments, including the Maine Department of Labor’s *Maine Workforce Outlook: 2018-2028*, that notes that “occupations in science, technology, engineering, and mathematics pay 93% more on average than those in other sectors. Moreover, they are growing faster. From

2012 to 2022, Maine science and technology jobs grew 21%, compared to just 3% growth for jobs in other sectors. Through 2028, these sectors are expected to grow another 6% while the rest of Maine's job market remains relatively flat, growing just 0.3%."

Other relevant studies and data include:

- Since 2009, the Maine State Chamber of Commerce, Educate Maine, and the Maine Development Foundation have promoted workforce and R&D investments in their [Making Maine Work](#) reports. The 2022 edition calls for expanding the size and capabilities of Maine's workforce, increasing R&D, and targeting high value-added industries. It notes, "State government can double its investment in R&D annually without running out of viable projects."
- The Maine Economic Growth Council emphasizes the importance of R&D in its annual report, [Measures of Growth](#) (2022). It recommends R&D spending as a percentage of Maine's economy increase from its current level of about 1% to the national average of 3% by 2030. In the most recent data year available (2019), Maine's R&D activity totaled about \$685 million which equates to roughly 1% of GDP and places Maine 44th of the 50 states.
- The Bioscience Association of Maine's [Life Sciences in Maine](#) report (2022) shows the industry's recent job growth in Maine has outpaced all other New England states.

All this data points to tremendous economic benefits and returns on investments in research, development, and commercialization. The last R&D bond that was passed by the Legislature and approved by the voters is another good representation of that fact. In 2017, that bond set aside \$45 million for targeted investments in innovation on projects that would have the greatest economic impacts. The Maine Technology Institute, our state's unique public-private partnership tasked with catalyzing innovation in Maine, administered those funds and made awards through a competitive process, utilizing extensive due diligence evaluating the technical merit and feasibility of all the projects, with a particular emphasis on economic impact and job creation.

There was tremendous demand for the funding as MTI received 267 proposals through two funding rounds with total requests exceeding \$425 million for the \$45 million in available funding. Ultimately, MTI made 28 consequential awards that generated 1,770 direct new jobs and roughly twice as many indirect and induced jobs. The funding leveraged over \$224 million in private sector matching investments and, according to an independent analysis, generated \$1.4 billion in economic impact throughout Maine.

LD 416 contemplates a similar MTI process and competition with all potential awardees needing to match any funding awards with at least one dollar for every dollar awarded.

Clearly, there is a demonstrated and significant demand for research and development investments and sustained public and private investments are key to moving the needle. The bond funds contained in LD 416 have the potential to drive meaningful economic growth and job creation across our great State.

Thank you for your time and consideration.

Sincerely,



-Heather Johnson, Commissioner
Dept. Of Economic & Community Development



Brian Whitney, President
Maine Technology Institute