## MAINE STATE LEGISLATURE

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TO: Members of the Joint Standing Committee on Education and Cultural

**Affairs** 

FROM: Jerry Pieh, Chair, and Thomas E. Keller, Executive Director, Maine STEM

Council

DATE: January 22, 2014

RE: Maine STEM Council briefing to accompany Maine Secretary of State Board

or Commission Annual Report Covering calendar year 2013 SCIENCE,

TECHNOLOGY, ENGINEERING AND MATHEMATICS COUNCIL

It is with great pleasure and appreciation that we report on the progress to date of the Maine STEM Council. This is in addition to the official report filed on December 31, 2013.

As a result of a bill submitted by Governor Paul LePage and following unanimous support of the Maine state legislature's Joint Standing Committee on Education and Cultural Affairs, both Houses of the Legislature established the Maine STEM Council in June of 2011. The Council was created in response to economic factors that point to the possibility of massive increases in STEM employment in Maine and the need to develop and facilitate a coherent action plan across agencies, organizations and individuals in Maine. The membership of this Council includes representatives of public and private agencies and organizations.

The major duty assigned to the Council is the development of "strategies for enhancing science, technology, engineering and mathematics education from prekindergarten through postsecondary education" (LD 1540). The Council is creating a 'roadmap' outlining those strategies, a dynamic plan that is based on policy and practice research in education and labor that will "recommend strategic directions for consideration by policymakers as they identify future investments in science, technology, engineering, and mathematics" (LD 1540). In addition, the Council is working with partners to develop initiatives to promote STEM workforce development and education in school and out of school.

Since its inception in June of 2011, the Council, led by its chair Dr. Jerry Pieh, has a remarkable list of accomplishments:

- Brought the Council to order for quarterly meetings
- Commissioned research on science, technology, engineering, and mathematics plans in other states
- Surveyed organizations across the nation that support state-wide STEM Councils
- Assigned Council members to coordinate with STEM councils in other states and national groups
- Established three subcommittees to explore engineering education, internships, and components of a strategic plan
- Developed a draft set of indicators a preliminary dashboard, so to speak, to accompany the road map

- Provided testimony to the Joint Subcommittee on Education and Cultural Affairs on at least three occasions
- Sought funding from public and private sources to undertake Council work
- Hired a part-time Executive Director

During early 2013 the University of Maine conducted and presented to the STEM Council information about STEM initiatives in other states. Among the information presented was information about the development and implementation of STEM roadmaps and data dashboards. These resources are prominent in states making progress on strengthen STEM across education and workforce development. The research conducted by the University was instrumental in shaping a bill sponsored by Senator Emily Cain seeking funding for the STEM Council. The purpose of the funding was to support the STEM Council to move more quickly and effectively to advance the legislative charge of the Council. The 125th Legislature appropriated \$27,000 to the STEM Council. The Council will receive \$5,000 in FY 2014 and \$22,000 in FY2015. The University of Maine System has also appropriated \$50,000 annually (FY14, FY15 and FY16) to fund the position of STEM Council Executive Director. Additional private donations have been committed during this period also to support the Executive Director position and the work of the STEM Council.

Much work remains to be accomplished, however. We hope to have a STEM roadmap within six months, with specific strategies, outcome targets, and assigned responsibilities and deadlines. We are planning to identify a set of indicators – the dashboard – to assess progress in achieving the targets in the roadmap. The roadmap and dashboard should integrate the plans and work of other related commissions and organizations. A longer term goal is to obtain a large grant(s) that will enable effective implementation of the roadmap, with flexible grant support for increased STEM business and industry labor capacity, prekindergarten through graduate school STEM education, and cross-agency support systems. The desired outcome of all of this work is to have a robust, innovative, exciting and accommodating STEM business and industry in Maine so Maine people can have fulfilling lives and well-paying occupations.

We thank you for your support of this important initiative and look forward to keeping you informed on our progress.

Thank you.