

Massachusetts STEM Pipeline Fund Regional STEM Networks

Request for Proposals – FY2019



Issued by:

**Massachusetts Executive Office of Education and
Massachusetts Department of Higher Education
One Ashburton Place, Room 1403
Boston, Massachusetts 02108**

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I. Introduction

The Commonwealth of Massachusetts became a national STEM leader when it issued a planning grant in 2004 to create the system of PreK-16 Regional STEM (Science, Technology, Engineering and Mathematics) Networks - a collaborative, statewide community of shared interest in STEM education. For more than a decade, the Networks have advanced the Commonwealth's agenda for STEM education and workforce pipeline. Schools, higher education institutions, businesses, non-profit groups, policy makers and others have come to rely on the Networks as a strategic instrument to align and unify local and regional systems, communicate and scale-up best-practice experiences and sustain this model of collaboration and performance improvement.

In May 2018, the Baker-Polito Administration announced the Commonwealth's first "STEM Week" which was held October 22 – 26, 2018. The eight existing Regional STEM Networks across the Commonwealth were given grants to coordinate and organize events during STEM Week. Their work led to more than 500 events being held across the state.

As the Pioneer Valley does not currently have a Regional STEM Network in operation, the purpose of this RFP is to establish a Network in the Pioneer Valley that can serve as a coordinator of STEM organizations, industries and educators, as well as serve as the central coordinator for the region's 2019 STEM Week events.

This grant will run from April 1, 2019 through December 30, 2019 and will be across fiscal year (FY) 2019 as well as fiscal year 2020. The FY 2020 portion of the grant is subject to appropriations in the final state FY 2020 budget.

Responses to this RFP should align their proposed work to the current priorities of the STEM Advisory Council as well as priorities of the three education agencies as outlined in later sections of this RFP.

II. History of Regional STEM Networks

In 2004, the Department of Higher Education (DHE) released an initial round of STEM Pipeline Fund planning grants to establish PreK-16 Regional STEM Networks. At that time, creating a statewide framework of regional stakeholders was considered the most effective system to 1) advance the STEM Pipeline Fund goals to increase the number of students interested in STEM majors and careers, 2) increase the number of qualified STEM educators, and 3) improve STEM educational offerings. A broad, representative membership of public and private PreK-12 schools and districts, public and private higher education institutions, business and industry partners, and non-profit organizations provided a statewide framework for regional adoption of best-practice initiatives. Early activities included administering student interest and enrichment projects, career awareness initiatives, and teacher professional development.

In January 2007 the DHE formalized seven Networks, awarding three-year grants totaling \$1.9 million. Two additional Networks – Boston and Metro North – followed, completing geographic coverage, statewide. After these initial grants, funding continued on an annual basis but at reduced levels, emphasizing the primary role of the Networks from direct management of projects to an increased focus on outreach, coordination, and collaboration of interested educators and organizations in their respective regions. This transition embodied the vision of the Networks as regional agents for promoting the Commonwealth’s STEM educational and workforce goals.

The Regional STEM Networks have proven to be an effective system for unifying diverse stakeholders in a common purpose to strengthen and increase the Commonwealth’s pipeline of STEM skilled workers. Two of the key lessons learned over the past 14 years of the Network’s existence are that a strong and sustainable Regional STEM Network needs all the following:

- a) A well-resourced and committed host institution;
- b) A passionate and effective manager to lead the agenda in order to enhance alignment, accountability, performance, innovation and efficiency of its work; and
- c) An engaged and energized membership.

These elements stood out among a number of key findings in two reports by UMass Donahue Institute: *Massachusetts STEM Pipeline Regional Networks: Promising Practices and Lessons Learned*¹ and *Regional STEM Networks Evaluation* report².

III. Purpose and Priorities

The purpose of this RFP is to establish a strong Regional STEM Network in the Pioneer Valley under the following priorities.

First, proposals must articulate a vision of tactical plans and longer-term strategies for starting and sustaining a Network in the Pioneer Valley. Proposed strategies should give sound consideration to engaging members and sustaining the Network.

For some applicants, this RFP may present an opportunity to reestablish and strengthen former Network operations. For others, this RFP will present the opportunity for new collaborations to emerge. All proposals should build upon best practices of the Regional STEM Network system by reflecting the essential components of comprehensive Network design. (See Appendix A for suggested design detail.)

¹ UMass Donahue Institute, “*Massachusetts STEM Pipeline Regional Networks: Promising Practices and Lessons Learned*” by Greta Shultz, Ed.D, and Jean Supel, 2010. Prepared for the Massachusetts Department of Higher Education and found here: <http://www.mass.edu/stem/outcomes/pipelinepresspubs.asp>.

² UMass Donahue Institute, *2013 Regional STEM Networks Evaluation: Summary of Interview and Online Survey Findings*, Presented to the Massachusetts Department of Higher Education also found on the DHE website reports page as shown above.

Second, proposals should suggest strategies and plans to promote at least one STEM Council priority during the grant year as well as how to address all of them in the long run. The STEM Advisory Council's priorities are to:

- a. Ensure that all students develop ***foundational skills*** in STEM subjects throughout their PK-12 experience. This focus should include frequent opportunities for relevant, hands-on learning that aligns topics across STEM subjects and connects to other parts of the curriculum (e.g., the Arts). Doing so will prepare students for post-secondary studies and entry-level career opportunities, regardless of their academic or occupational focus.
- b. ***Increase awareness and interest in STEM careers among students and parents, and develop high-quality, integrated STEM pathways*** from secondary school to college. This focus should include relevant career guidance and exploration, workplace experiences, and applied learning across all STEM subjects (including math) to ensure that more high school graduates, especially those from historically under-represented populations, are ready to pursue STEM majors in higher education and technical careers in STEM fields.
- c. ***Deepen partnerships among employers***, vocational-technical schools, community colleges, universities, and adult education providers to promote career opportunities in STEM fields. This focus should also create scalable post-secondary STEM programs for adult learners and incumbent workers to provide more high-quality STEM career on-ramps and on-the-job training opportunities that are responsive to needs of employers.

Third, proposals should outline a strategy for organizing STEM Week in 2019 and beyond.

IV. Eligibility

In order to be eligible for funding, a Network must:

- Represent a collaboration of partners from public and private PreK-12 schools and districts, public and private higher education institutions, business and industry, and non-profit organizations within the Pioneer Valley in Massachusetts.
- Have a strong lead partner with a history of commitment to regional collaboration within the Pioneer Valley and to STEM education. The lead partner should also be able to demonstrate a commitment from its organization's leadership to provide ongoing operational infrastructure (staff, space, technology, fiscal management) for the Network.
- Demonstrate prior experience or willingness in leading a network of individuals from many different contexts to participate according to their interests and expertise while sustaining collective attention on progress toward common goals.
- Plan for continued outreach and membership development with an emphasis on members from industry.

V. Proposal Requirements

A. Proposal Abstract

Not more than one page. Include the following:

- Name of Regional STEM Network
- Lead Applicant Information
 - Organization (***Include a letter of commitment from an authorized representative of the organization***)
 - Contact Person (Program Manager)
 - Title
 - Telephone Number
 - Email Address
- List of member organizations
- Geographical Coverage.
 - List or map of towns and cities included in this regional definition.

B. Narrative

Not to exceed 10 pages, with standard 1" margins, 1.5 line spacing and 10 to 12-point font.

1. Programmatic Focus

- a) Please articulate your broad, forward-looking, vision of the operation and development of your Network. Your vision should build upon and reflect the successful history of the Networks and project their continued future development. To aid you in this effort, we have included an outline of the elemental components of successful Networks in appendix A to this RFP.
- b) The STEM Council goals and priorities are clearly articulated in Section III of this RFP. Proposals should address your Network's strategic plan for advancing one or more of these goals. Summarize your Network's available institutional and human resources – time, materials and personnel - as well as the implementation strategies of your network, to advance this work.
- c) Coordinating and organizing STEM Week is a major responsibility of the Regional STEM Network. Proposals should address your Network's plan for STEM Week 2019. See appendix B for more details about STEM Week.

2. Network Governance Structure

As stated earlier, each Network needs a well-resourced and committed host institution as well as a passionate and effective manager. Please provide summary details about your proposed Network governance structure.

a) Lead Institution

- Describe the direct and in-kind support the lead/host institution can provide such as:
 - Meeting space
 - Staff
 - Equipment
 - Professional Development
 - STEM Programs, etc.
- Identify the level of involvement of the institution faculty and staff (or similar level personnel if not an educational institution), including their awareness of, and support for, the work of the Network.

b) Project Manager

- Identify the proposed project manager and summarize their qualifications.

c) Sustainability & Growth Over Time

a) Plans for Sustainability and Growth

- Describe the institution's expectations regarding their commitment to sustainability and growing this work. We recognize that this grant is for one year; however, we are interested in a lead institution that understands the ongoing nature of this work.

VI. Evaluation and Reporting

A formal independent evaluation of this proposal is not required. However, we will request a mid-year and year-end report on the progress of your strategic plans, including planning for STEM Week. Due dates of these reports will be identified in the grant contract for the awarded proposal.

VII. Submission Instructions

Proposals will be accepted through close of business on February 11, 2019. Proposals should be formatted following the instructions outlined in the “Proposal Requirements” section of this RFP.

An information session will be held by conference call on February 8, 2019, to respond to questions about the RFP. Information regarding the exact time and call-in number will be posted on the Department of Higher Education (DHE) website found here:

<http://www.mass.edu/stem/fundedprojects/rfpcurrent.asp>. Anyone interested in participating should send an email to Keith Connors, Program Manager of the STEM Pipeline Fund, at the address shown below. FAQs will be posted to the **Regional STEM Network** section of the DHE website, as well as on CommBuys, after the session is completed.

Please submit your completed proposal via email to:

Keith Connors,
Senior Program Manager of the STEM Pipeline Fund
kconnors@dhe.mass.edu.

Make sure to write “**Regional STEM Network Proposal**” in the email subject line.

Timeline	
Release Date	January 30, 2019
Information Session	February 8, 2019
Proposals Due	March 8, 2019 (no later than 5 pm.
Awards Announced	April 1, 2019

VIII. Proposal Review

A proposal review team will read, score and recommend proposals for funding.

A scoring rubric will be developed and published to inform applicants about the decision criteria to be used in the final selection and award process. Proposals will earn high scores for articulating clear and thoughtful strategies for establishing, developing and sustaining an effective Network that is aligned to at least one STEM Council goal. Favorable scores will also be given to proposals that offer a clear plan for organizing STEM Week in October 2019, as outlined in Section IV, under *Purpose and Priorities*.

IX. Awards

Subject to final FY 20 state appropriations, the grant award is **\$30,000** for the selected proposal. The grant period will run from April 1, 2019 to December 30, 2019.

X. Policies

Grant Disbursement

Following the applicant's acceptance of the award letter, and the execution of the Standard Contract, or the Interagency Service Agreement, and any other required documents, the applicant can expect to receive disbursements on a schedule consistent to the needs of the project.

Publicity

Grant recipients are obligated to acknowledge the funding source – the Massachusetts STEM Advisory Council – in all print materials, websites and press releases.

Solicitor Responsibility

Solicitors may not alter (manually or electronically) the grant application language or any grant application component files. Modifications to the body of the grant application, specifications, terms and conditions, or application which change the intent of this grant application are prohibited and may disqualify a response.

All costs associated with responding to this RFP are the sole responsibility of the responding organization. The Executive Office of Education and the Department of Higher Education reserve the right to use any and all ideas included in any response without incurring any obligations to the responding organization or committing to awards for the proposed services. Responses become the property of the Commonwealth of Massachusetts.

Performance

Any funds distributed to successful applicants are done so with the expectation that the grantee will deliver the programs as described and serve the numbers of participants detailed in the application. If the applicant is for some reason unable to fulfill the program described in the original proposal, we reserve the right to recover funds distributed.

Legal Disclaimer

This RFP does not represent a contractual agreement by the Executive Office of Education or by the Department of Higher Education to any applying organization. Selected organizations will enter into a contractual agreement with the both organizations upon award.

THE EXECUTIVE OFFICE OF EDUCATION AND THE DEPARTMENT OF HIGHER EDUCATION RESERVE THE RIGHT TO REJECT ANY AND ALL RESPONSES AND THE RIGHT TO CANCEL THIS REQUEST FOR QUALIFIED PROPOSALS (RFP) AT ANY TIME PRIOR TO AWARD.

XI. Proposed Budget

Please complete the table below, or a similar budget of your own, with a breakdown of the requested funding. Upon completion of the table or your own budget, please provide an additional *Budget Narrative* that includes specific details of each budget item in the table. If using the table below, double click on it to make it interactive. This action will allow you to fill it each line. The budget and budget narrative count towards the one-page abstract and 10-page narrative.

Categories	Total Grant Funds Requested
Total Salaries:	\$ -
Administrator	
Support Staff	
Other	
Fringe Benefits	
Travel	
Contractual Services	
Total Supplies & Materials	\$ -
Curriculum	
Equipment	
Other	
Transportation	
Training	
Tuition & Stipends	
Other	
Evaluation	
Indirect Costs (10% Max)	
Total	\$ -
Plus Private Matching Funds	
Grand Total	\$ -

Network Name: _____

Project Manager: _____

Signature/Date: _____

XII. Appendix A

Key Network Components

Based on what we learned from the key findings of the aforementioned UMass Donahue Institute report titled “*Massachusetts STEM Pipeline Regional Networks: Promising Practices and Lessons Learned*” as well as the learning that has occurred on effective practices over the more than a decade of their existence, strong Networks should possess all the following components:

- 1. A Lead/Host Institution** – Home base of the STEM Network. Strong host institutions have many of the following elements:
 - High level involvement of institution faculty and staff, including knowledge of the project by the institution president and cross-departmental participation;
 - Institution representatives contribute to membership development efforts;
 - Institution representatives advocate for national and statewide policy and resources; and
 - Institution provides in-kind support and exhibits potential for incorporating aspects of the Network permanently into the institution in a manner that does not rely on grant funds.
- 2. Membership or representation** from the following constituencies:
 - Higher education both public and private including the community colleges, state universities and the University of Massachusetts.
 - K-12 schools and districts, both public and private, with representation coming from superintendents, curriculum directors, guidance counselors, and teachers.
 - Business and industry: consider key sectors – life science, bio-pharma, biotechnology, health services, medical devices, science and technology, manufacturing, information technology, higher education, and research.
 - MassHire Workforce Development Boards: Mass Hire Workforce Development Boards (formerly known as Workforce Investment Boards and Regional Employment Boards.
 - Non-profit organizations – representation from museums and learning centers
- 3. Network Administrator/Manager** - A qualified network manager is an essential part of a successful Network with various responsibilities including, but not limited, to:
 - Communicating with DHE, including but not limited to:
 - a. Timely and thorough replies to DHE inquiries and reporting requirements.
 - b. Working with Fiscal Office to ensure fiscal reporting requirements are met.
 - c. Notifying DHE of any personal, program or expenditure changes that differ from accepted proposal or contractual agreement.
 - Communicating with Network members, including but not limited to:
 - a. Distributing regular information about new grant opportunities, professional development activities, conferences, etc.

- b. Updating website or, if handled by another individual, coordinating changes.
 - Organizing meetings, including but not limited to:
 - a. Preparing agendas and any other meeting materials.
 - b. Taking notes and distributing follow-up information.
 - Continuing membership development in conjunction with institutional leadership and sub-committees, including but not limited to:
 - a. Developing lists of target members.
 - b. Creating and updating outreach materials and Network brochure.
 - Overseeing evaluation process, including but not limited to:
 - a. Organizing visits by local and statewide evaluators as necessary.
 - b. Ensuring local and statewide evaluators receive required information promptly.
 - c. Ensuring local evaluator adheres to DHE and contractual deadlines.
- 4. An Advisory Council/Board** – the membership composition of the board should strive to include at least one member from each of the listed categories above under “membership”. The role of the advisory council/board should include the following:
- Serving as a sounding board for accountability and strategic planning;
 - Reviewing the Network’s progress toward goals and adherence with strategic plan;
 - Providing advice, expertise, and potentially in-kind or financial assistance; and
 - Broadening the base of partners, particularly employers.
- 5. Regular Meetings** – a regular schedule of meetings – at a frequency to be determined by the lead institution – is required to provide the opportunity for members to network, share best practices, identify regional needs, communicate new STEM initiatives, events and activities and to strategize on advancing the STEM Council goals articulated in this RFP.
- 6. Needs Assessment/Strategic Plan** – a preliminary needs assessment is recommended to determine the needs, or “gaps”, between current conditions and desired conditions or “wants”. A sound needs assessment can ensure a Network outlines the right set of priorities in its strategic plan. While this is valuable, it is not a requirement of the FY 19 Regional STEM Network grant.
- 7. Website** – a strong web presence to communicate regional STEM events, programs, workshops, and all associated STEM happenings. The website should list the contact information of the Network program manager and should list the names of the advisory committee members.

Newsletter – periodically issued to bind the community in its shared interest in regional STEM opportunities and resources for the myriad of stakeholders - students, teachers, parents, businesses, etc.

XIII. Appendix B

Scope of Work for Regional STEM Networks

Funded Regional STEM Networks will be responsible for the following activities involved with STEM Week:

- Build awareness and enthusiasm for STEM Week among their membership as well as the region's schools and STEM-related out-of-school time organizations.
- Organize and confirm at least eight STEM Week activities in total*, including at least one STEM Week activity each day, in their region's schools.
 - Regional STEM Networks should plan to have at least one activity each day that is high-rigor and high-engagement and can be highlighted for press and/or a visit by the Administration or STEM Council during STEM Week.
- Emphasis should be put on organizing activities for students from elementary school through college. Compile an initial list of STEM Week activities in the region by June 1, 2019 and a final list of STEM Week activities by September 2019 (this final list will be used by the Executive Office of Education's Communications Director to develop media outreach).
- Leverage institutional resources to coordinate on outreach – and potentially conduct outreach – to local media for promotion of STEM Week and specific STEM Week activities with the Executive Office of Education.
- Participate in a 2019 STEM Summit breakout session panel if a Summit proposal is selected.
- Report on STEM Week planning and organizing, with lessons learned on best practices for successful outcomes, in the required year-end report.
- Participate in bi-weekly calls on planning of STEM Week Activities during the height of planning.

*All STEM Week activities organized with resources from this grant should align to the STEM Advisory Council mission.