## **Request for Information**

## **Request for Information:** R&ENDEPSTEMFY22RFI

**Agency/Office:** Washington Headquarters Services/Acquisition Directorate (WHS/AD) on behalf of the Office of the Under Secretary of Defense (Research & Engineering)

**Title:** National Defense Education Program (NDEP) Science, Technology, Engineering, and Mathematics (STEM) Consortia Request for Information (RFI) for the Office of the Under Secretary of Defense (Research & Engineering)

**Disclaimer:** The Department of Defense (DoD) may use responses to this request for information (RFI) to inform future solicitation / funding opportunity announcement. The purpose of this RFI is to survey industry (to include non-profits, academia, large, and small businesses (e.g., 8(a), service-disabled Veteran-owned small business, HUBZone small business, small disadvantaged business, Veteran-owned small business, and woman-owned small business)) for relevant information. Hence, submitted responses should not be worded as proposals. In accordance with FAR 15.201(e), responses to this notice are not offers and cannot be accepted by the Government to form a binding contract. The Government will not reimburse respondents for any costs associated with submissions of the RFI being requested or reimburse expenses incurred to interested parties for responses.

Background/Overview: This RFI consists of two focuses, which are outlined below:

- (1) Transitioning students from 2-year Community College science, technology, engineering, and mathematics (STEM) programs to a STEM degree at a 4-year institution through a consortium based approach
- (2) Preparing an agile and diverse workforce through technical training and certificate programs and supporting these programs through collaborative partnerships and consortia

The Department of Defense (DoD) STEM mission is to inspire, cultivate, and develop exceptional STEM talent through a continuum of opportunities to enrich the current and future DoD workforce poised to tackle evolving defense technological challenges. Towards this end, DoD invests in the future and current STEM talent pools by fostering pathways that connect to a continuum of enriching DoD programs to meet the unique mission needs of the Department.

In accordance with 10 USC §2192, Improvement *of education in technical fields: general authority regarding education in science, technology, engineering, and mathematics*, NDEP through WHS/AD, is conducting market research to investigate effective approaches at creating STEM education focused consortia or communities of practice at Community Colleges and 2-

year colleges. The Federal STEM Strategy states, "The future, more diverse, pool of workready, STEM-literate Americans will come through many pathways<sup>1</sup>. About half of students who pursue higher education are likely to start at a community college"<sup>2</sup>. DoD is the largest employer of scientists and engineers in the United States. Therefore, the Department must maintain a robust pipeline of STEM talent by investing in postsecondary STEM activities, specifically in 2-year colleges, to ensure the DoD has enduring access to the best and brightest talent in the near-, mid-, and long-term.

This RFI explicitly encourages input from or regarding projects that involve consortia or communities of practices between 2-year institutions, Community Colleges, and relevant partners; improve the capacity of community colleges to create impactful STEM educational experiences for students and teachers; promote the transition from 2 to 4-year degrees; and prepare an agile and diverse 21st century technical workforce.

Response(s) to the question(s) below should focus on effective models with specific efforts in at least one of the following:

- Reaching and attracting Veterans, their dependents, and military connected students to STEM opportunities<sup>3,4</sup>
- Providing meaningful STEM experiences for students and faculty especially those from underserved populations<sup>5</sup>
- Fostering/leveraging partnerships and ecosystems to amplify reach and impact of STEM activity through multi-institution consortia<sup>6</sup>

<sup>3</sup> FY2020 National Defense Authorization Act, Section 211, 10 USC §2192b Program on enhancement of preparation of dependents of members of armed forces for careers in science, technology, engineering, and mathematics

<sup>4</sup> S. 153 – Supporting Veterans in STEM Careers Act

<sup>5</sup> DoD STEM defines Underserved populations as students that are dependents of members of the military, national guard and reserves or military connected; students who are eligible to receive Free and Reduced-price Meals—FARMS; Students belonging to racial and ethnic minorities that are historically underrepresented in STEM (i.e., Alaska Natives, Native Americans, Blacks or African Americans, Latinx/Hispanics, Native Hawaiians and other Pacific Islanders); Students with disabilities; Students who are English language learners (ELLs); First-generation college bound students:; Students in rural, frontier, or other Federal targeted outreach schools; and Females in certain STEM fields where they remain underrepresented (Gender) (e.g., physical science, computer science, mathematics, or engineering)

<sup>&</sup>lt;sup>1</sup> Barriers and Opportunities for 2-Year and 4-Year STEM Degrees: Systematic Change to Support Students' Diverse Pathways (2016). https://www.nap.edu/catalog/21739/barriers-and-opportunities-for-2-year-and-4-year-stem-degrees

<sup>&</sup>lt;sup>2</sup> Charting a Course for Success: America's Strategy for STEM Education (2018). https://trumpwhitehouse.archives.gov/wp-content/uploads/2018/12/STEM-Education-Strategic-Plan-2018.pdf

- Promoting transition from 2-year colleges to 4-year degrees in STEM fields
- Technical training and certifications through 2-year degree programs, especially in AI, cyber, and advanced manufacturing

Questions to address:

Respondents can answer any of the questions #1 - #8, but are not required to respond to all questions #1 - #8.

1. What are the biggest needs and challenges that Community Colleges face in regards to STEM education? How could those needs and challenges best be addressed?

2. What educational programs can be developed and implemented at Community Colleges to support DoD science and technology priority areas (<u>https://www.cto.mil/modernization-priorities/</u>)?

3. What are effective ways in preparing 2-year STEM students to transition into 4-year STEM degrees or the STEM workforce?

4. What are effective ways to promote technical training and STEM certificate programs?

5. What partners do Community Colleges and 2-year institutions need to successfully promote certificate programs and/or transitioning students to 4-year institutions? What benefits would come from each type of partner?

6. Whether you are currently part of a consortium-based model or would be interested in participating in one, describe the benefits and drawbacks of such a partnership. What type of consortium structure maximized the creation of effective and lasting relationships between institutions in regards to promoting STEM education? What would the role of the management entity look like, and what partners would be involved?

7. If you are currently part of a local or regional ecosystem<sup>7</sup>, either formally or informally, describe the structure and support that the ecosystem provides. Please describe the benefits and drawbacks that you encounter. What efforts support STEM participation by creating accessible, inclusive STEM learning opportunities and promoting STEM careers?

<sup>6</sup> FY2018 National Defense Authorization Act, Section 217, 10 USC §2358 Mechanisms for Expedited Access to Technical Talent and Expertise at Academic Institutions to Support Department of Defense Missions

<sup>7</sup> STEM Ecosystem: STEM education ecosystems consist of multi-sector partners united by a collective vision of supporting participation in STEM through the creation of accessible, inclusive STEM learning opportunities that promote STEM literacy and expose learners to a variety of career paths and facilitate critical transitions from Pre-K through career. A STEM education ecosystem continuously evaluates its activities and adapts as needed to improve outcomes for learners, plans for the long-term, and invests in communicating its work to build broad support and advance best-practices.

8. What are effective ways in assessing program impact relative to topics mentioned above?

**Requirement:** All qualified, experienced, and capable sources are welcome to respond to this RFI. Large-scale and small-scale examples of programs are of equal interest. Your capabilities should cover any and all areas of focus delineated above. There is no target of years in relevant experience if a program has evidence-based effectiveness and proven results.

In addition, please provide the following Point of Contact information for all responses:

Company: Address: Point of Contact: Phone Number: Email Address: Business Size and Classification: [example, Large Business, Small Business, 8(a), Woman-Owned/Economically Disadvantaged Woman-Owned, Historically Underutilized Business Zone (HUBZone), Veteran-Owned, Service-Disabled Veteran-Owned)]

Security Clearance: No security clearance is required for this requirement

## **NAICS recommendations:**

- 541713 Research and Development in Nanotechnology
- 541714 Research and Development in Biotechnology
- 541715 Research and Development in the Physical, Engineering, and Life Sciences;
- 541720 Research and Development in the Social Sciences and Humanities;
- 611310 Colleges, Universities, and Professional Schools;
- 611430 Professional and Management Development Training;
- 611519 Other Technical and Trade Schools;
- 611691 Exam Preparation and Tutoring;
- 611710 Educational Support Services;
- 712110 Museums;
- 813211 Grantmaking Foundations
- 923110 Administration of Education Programs;

**Submission Requirements:** All responses to the RFI should be submitted via e-mail to <u>osd.dodstem@mail.mil</u> following the <u>Schedule of Events</u> below. The government is contemplating holding an informational workshop/webinar after the close of the RFI. If you would like to participate, RSVP to the email address provided and state I, II, and/or III from the areas of interest on page 1. **Please no phone calls.** 

Schedule of Events		
Event	Date	Time
Questions Regarding RFI	23 August, 2021	17:00 EST
FAQ Posting	27 August, 2021	
RFI Responses Due	10 September, 2021	17:00 EST

There is a maximum page limitation of six (6) pages:

- four (4) pages for the responses to questions
- two (2) pages for the capability statement

All responses must be typed, single spaced using 12 point, Times New Roman, font, within an 8.5 by 11-inch page size, in Adobe Acrobat PDF (.pdf) or Microsoft Word files. No hard copy or facsimile submissions will be accepted. Cover letters and extraneous materials (brochures, etc.) will not be considered.

All submissions shall be at the UNCLASSIFIED level and shall clearly mark proprietary information. All submissions shall include contact information for the individual and/or organization (as appropriate) making the submission.

At the discretion of the Office of the Under Secretary of Defense (Research & Engineering), responders may be contacted for further clarification or additional information; if you do not wish to be contacted please indicate so in your response.