



**National Strategy for STEMM Equity and Excellence  
Open Comment Period Town Halls  
October 2023**

**Town Hall Series Summary and Readout**

The STEMM Opportunity Alliance (SOA) hosted a series of five town halls in October 2023 during the open comment period for the draft National Strategy for STEMM Equity and Excellence, each focused on one of the strategy's five pillars: driving STEMM equity via *Exposure* in early childhood, *Inspiration* through K-12 teaching, *Discovery* in higher education, *Innovation* in R&D, and *Opportunity* in the workforce. These town halls provided a forum for hearing directly from voices across the STEMM ecosystem and country about what the draft strategy gets right, what it is still missing, and what needs further refinement, as well as to discuss potential needs for translating theory into action.

Across all five town halls, participants' responses to the draft National Strategy have helped the community identify areas where the plan can be strengthened and made even more impactful, building on the draft's strong foundation of goals, strategic approaches, and key action steps. As a result, feedback shared by participants in town hall conversations, outlined below, centers on where further thinking and community input can be additive in refining the work to date. Below are brief summaries of key themes and discussion points from each town hall.

***Exposure: Sparking Curiosity in Every Child***

***October 12, 1:00-2:00 p.m. ET***

The first pillar, Exposure, offers a roadmap for bringing more diverse talent into STEMM by starting early in childhood. Exposure to STEMM throughout childhood is essential to sparking and harnessing curiosity and exploration and opening pathways to future opportunities. Key themes from discussion of the Exposure pillar among town hall participants are described below.

***Key Themes:***

- Participants expressed their appreciation for the draft National Strategy's focus on exposure in early childhood, and in particular endorsed the draft's emphasis on collective impact through the multiplicative efforts of many partners and actors across the STEMM ecosystem.

- Participants noted that the draft mentioned many key topics in childhood development, but could be more explicit about development occurring in elementary schools. Ideas for strengthening elementary schooling included educational development in Kindergarten through third grade, improved support for girls, and increased involvement of and support for parents.
- Town hall attendees suggested that the final draft of the National Strategy could become even stronger by leveraging research that exists from state STEMM networks and educational development researchers which have been studying populations for decades.
- Participants named other potential avenues for strengthening PreK-12 STEMM education, including: creating youth-led learning opportunities to spark curiosity, developing greater investment in high quality community learning centers and after school programs, and encouraging mentorship for young learners.

### *Inspiration: Developing Skilled and Diverse Educators*

*October 13, 1:00-2:00 p.m. ET*

The second pillar, Inspiration, addresses the need for far more skilled math and science educators, in both in- and out-of-school learning environments, to meet demand. This includes a goal of ending the math and science teacher shortage. Key themes from discussion of the Inspiration pillar among town hall participants are described below.

#### *Key Themes:*

- Participants were pleased with the draft National Strategy's strong emphasis on addressing the teacher shortage and better supporting and preparing educators. They also expressed energy around the inclusion of educators in SOA's co-construction events and indicated their hope that the Alliance will continue bringing teachers to the table for future conversations, especially regarding the implementation of the National Strategy.
- Attendees highlighted the disconnect between educator preparation and discipline-based training at the university level in STEMM fields. They remarked that the draft National Strategy could be further strengthened by explicitly ensuring educators receive robust STEMM training so that they are better equipped to prepare students for promising careers.
- Participants underscored the importance of mentorship in preparing individuals for success in STEMM careers, including teaching. While the draft National Strategy does include mentorship and apprenticeships as important tools for exposing individuals to

STEMM opportunities, attendees suggested that they could be more prominently featured in the final version.

- Town hall attendees emphasized the importance of cultivating a diverse teaching population so that information is taught in a culturally relevant manner, expressing their support for the goals identified in the Inspiration pillar.

### *Discovery: Creating Opportunity for All in Higher Education*

*October 17, 4:00-5:00 p.m. ET*

The third pillar, Discovery, proposes a plan for closing the opportunity gap in higher education, so that all students have the opportunity to gain new skills, knowledge, and experiences that can lead to the jobs of the future. Key themes from discussion of the Discovery pillar among town hall participants are described below.

#### *Key Themes:*

- Participants expressed enthusiasm for the draft National Strategy and the co-construction process through which it was produced. They were energized by the draft's call for immediate alignment and action across the STEMM ecosystem.
- Participants named a need to ensure that students in all 50 states have adequate access to the technology needed to achieve their STEMM goals. They noted there is a specific and critical need to bridge the digital divide in the U.S. to ensure that all students have equal access to STEMM learning opportunities.
- Stakeholders noted that there is not necessarily a shortage of *opportunity* in STEMM higher education, but that there is a shortage of *access* to opportunity. Participants shared that the draft National Strategy may benefit from including approaches for ensuring individuals from historically excluded and marginalized backgrounds and/or rural communities have equal access to opportunities, in higher education and in the STEMM ecosystem at large.
- Attendees noted that while improving equity in higher education is critical, the final National Strategy could also include even greater support for non-traditional entry pathways into STEMM fields. Promoting these pathways for individuals who do not follow conventional education and career trajectories may be especially critical for bringing more diverse individuals into the STEMM workforce.

### *Innovation: Leveraging Diverse Minds in R&D*

*October 30, 2:00-3:00 p.m. ET*

The fourth pillar, Innovation, explores how the ecosystem can ensure it's bringing diverse minds into the STEMM research community, to drive innovation and solve the challenges of the future. Key themes from discussion of the Innovation pillar among town hall participants are described below.

*Key Themes:*

- Attendees shared their appreciation for the draft National Strategy's focus on increasing funding for and supporting researchers from historically excluded and marginalized communities. They noted the gravity of current disparities in research and development and shared personal anecdotes about how current processes fail and exclude diverse researchers.
- Participants named ideas around R1 research university statuses as they pertain to Minority Serving Institutions (MSI) in higher education, specifically calling attention to ways to better support MSIs, which are often classified as R2 institutions, in research and development. For instance, participants called for exploring the development of distinct R1 institution types, to avoid excluding MSIs from meeting the criteria required to achieve R1 status.
- Town hall attendees noted the importance of creating opportunities for undergraduate students from historically excluded and marginalized communities to engage in research at their universities. By offering undergraduates research opportunities, universities can set the stage for students to understand and embark on research pathways and careers.
- Participants underscored the need for making improvements to the peer review process to ensure equity in research and development, naming that the diversity of reviewers is often not reflective of scientists from historically excluded and marginalized communities or researchers at R2 institutions which have a higher proportion of students from these communities.

### *Opportunity: Ensuring All Workers Thrive*

*October 31, 2:00-3:00 p.m. ET*

The final pillar, Opportunity, describes how the ecosystem can enable all workers to access opportunities to thrive in STEMM jobs and careers and in those non-STEMM jobs that employ STEMM skills. Key themes from discussion of the Opportunity pillar among town hall participants are described below.

*Key Themes:*

- Town hall attendees endorsed approaches described in the draft National Strategy to help diverse workers thrive in STEMM careers, including: compensating and recognizing leaders and members of affinity groups and promoting equitable career advancement and access to leadership roles.
- Attendees discussed whether the draft National Strategy's ultimate goal of increasing the STEMM workforce by 10 million people may be too modest. They mentioned that the availability of data may help to determine whether this goal could be inflated to include a larger addition to the workforce.
- As noted above, participants appreciated the draft National Strategy's support for affinity groups, but also stressed the need to ensure that an undue burden is not placed upon individuals from historically excluded and marginalized groups. These individuals are often called upon to take on mentorship roles and contribute monetarily to affinity groups.

### *Next Steps*

The town hall series was part of a broader effort, from early October to early November 2023, to collect feedback and ensure the final version of the National Strategy is representative of the diverse perspectives and needs of the STEMM ecosystem. The feedback gathered in the town hall series on the draft will supplement the input sourced via written comments and SOA's fall convenings in Dallas, TX, cohosted by Lyda Hill Philanthropies and the National Math and Science Initiative, and in Tempe, Arizona, hosted by Arizona State University. With the close of the open comment period, the SOA team will now undertake the process of aggregating feedback collected during the period and revising the draft National Strategy to incorporate the key insights and perspectives voiced by town hall participants, convening attendees, and written comment respondents.

The final version of the National Strategy for STEMM Equity and Excellence, which will represent the culmination of a year of deep conversation with over 1,500 leaders and partners across the STEMM ecosystem, will be released in early 2024.