



STEMM  
OPPORTUNITY  
ALLIANCE

# 2023 ANNUAL REPORT



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# FOREWORD

A year ago, the STEMM Opportunity Alliance knew that our mission to “Establish a STEMM ecosystem firmly rooted in equity, inclusion, and scientific excellence to drive progress, innovation, and prosperity for all by 2050” was both audacious and necessary. It is a mission that matters for the current and future STEMM workforce just as much as it matters for the prosperity, safety, and progress of all Americans. As we celebrate the Alliance’s milestones and look ahead to all we still need to do to realize SOA’s mission, we are grateful to each of our partners and everyone who contributed to the creation of the U.S.’s first-ever national strategy for STEMM equity & excellence - *STEMM Equity and Excellence 2050: A National Strategy for Progress and Prosperity* - and making SOA a force for the future of science. We are energized as we move into 2024 to shift our efforts toward aligned actions and authentic collaborations for national change.

**In partnership,**

**Travis T. York, PhD**

Director, Inclusive STEM Ecosystems for Equity & Diversity  
American Association for the Advancement of Science





## ABOUT SOA

The STEMM (Science, Technology, Engineering, Mathematics, & Medicine) Opportunity Alliance (SOA) is a national effort by the American Association for the Advancement of Science (AAAS), with the support of the Doris Duke Foundation (DDF), which galvanizes stakeholders to achieve STEMM equity and excellence by 2050. Launched in December 2022 at the inaugural White House Summit on STEMM Equity and Excellence, SOA brings together organizations and entities from across sectors and scientific communities that are committed to developing and advancing a National Strategy for achieving shared goals for equity in STEMM. To view SOA's growing list of partners committed to achieving STEMM equity and excellence, please visit [stemmopportunity.org/partners](https://stemmopportunity.org/partners).

### Vision

Building a STEMM ecosystem rooted in equity, inclusion, and scientific excellence to power progress, innovation and prosperity for all by 2050.

### Mission

SOA addresses key areas to attain fundamental, systemic change and ensure the diversity that is necessary for the increased performance and innovative ideas that are needed to keep the United States competitive.

### Strategy

SOA enables public and private institutions to work across silos to make substantive changes that can improve outcomes in STEMM for millions of Americans from historically excluded and marginalized groups. This includes:

- **Elevating STEMM Equity as a National Priority** through the creation of a National Strategy;
- **Supporting Partner Commitments** aligned with SOA's goals and critical to achieving STEMM equity and excellence;
- **Creating and Convening Working Groups** across key issue areas to organize and deepen relationships among a wide range of partners from the public, private, and government sectors;
- **Hosting Targeted Events** where public, private, and government leaders can discuss key challenges and opportunities for moving the needle on STEMM equity; and
- **Holding the STEMM Ecosystem Accountable** by developing progress accountability metrics to track progress against shared goals.



# ABOUT SOA: LEADERSHIP

## American Association for the Advancement of Science Staff

Travis York, Director of Inclusive STEM Ecosystems for Equity and Diversity  
 Shirley M. Malcom, Senior Advisor to the CEO and Director of SEA Change  
 Michael Feder, Program Director, Inclusive STEM Ecosystems for Equity and Diversity

## Founding Partners

American Association for the Advancement of Science  
 Doris Duke Foundation

## Advisory Council

Visit [stemmopportunity.org/about-us#advisory-council](https://stemmopportunity.org/about-us#advisory-council) to view Advisory Council members.

To keep in touch, the STEM Opportunity Alliance can be found at [www.stemmopportunity.org](https://www.stemmopportunity.org). On the website, there are opportunities to commit to becoming a partner, sign up for the newsletter, connect on social media, and more.



# SOA 2023-2024 GOALS



## OUR 4 PHASES OF WORK

**PHASE 1**  
**Laying the foundation for the National Strategy**

- Official launch at the White House Summit on Equity and Excellence in STEMM. (Dec. 2022)
- Build a framework for the national strategy.



- Get input on the framework from distinguished members of SOA's Advisory Council.
- Host a series of events across the country to engage communities and cross-sector experts in a discussion of the national strategy, effective practices, and their important commitments to equity and excellence.

**PHASE 2**  
**Co-developing the National Strategy**

**PHASE 3**  
**Fine-tuning the National Strategy**

- Revise the strategy to address stakeholder and Advisory Council input from the co-development process.
- Request input from SOA partners and members of the public.
- Address feedback from all stakeholders and prepare for the strategy's official public release.



- Garner new partner commitments that align with the finalized strategy.
- Coordinate closely with SOA partners and the White House on implementation.
- Develop a communications roadmap for socializing the plan and highlighting contributions from Advisory Council members.
- Grow SOA to include over 200 partners.
- Align \$1 billion in funding among the SOA partners to the National Strategy.

**PHASE 4**  
**Implementing the National Strategy**



# 2023 ACCOMPLISHMENTS

**The STEMM Opportunity Alliance accomplished all of its goals for 2023: hosting a set of stakeholder convenings, co-constructing *STEMM Equity and Excellence 2050: A National Strategy for Progress and Prosperity*, and nearly doubling the number of partner organizations.**



## PHASE 1 Laying the foundation for the National Strategy

In December 2022, the American Association for the Advancement of Science (AAAS), in collaboration with the Doris Duke Foundation (DDF) and the White House Office of Science and Technology Policy (OSTP), launched SOA at the first-ever White House Summit on STEMM Equity and Excellence.

Building on the momentum from the White House Summit, in early 2023 SOA developed and distributed an initial framework National Strategy.



## PHASE 2 Co-developing the National Strategy

With an initial framework in hand, SOA's focus in 2023 was engaging leaders in every sector — from industry and education to community organizations — to co-construct the National Strategy.

In cities across the country, from Atlanta to Chicago to Boise to Jacksonville to Washington D.C., SOA brought together its partners and local STEMM communities to contribute their perspectives and expertise to the draft National Strategy. **SOA's regional STEMM Summits included the following events\*:**

**February 24: Achieving STEMM Equity and Excellence in Postsecondary Education Summit**, hosted by Morgan State University, Baltimore, MD

**March 4: SOA Listening Session at the AAAS Annual Meeting**, Washington, DC

**April 18: Achieving STEMM Equity and Excellence in Communities and Schools Summit**, hosted by the New York Hall of Science, New York City

**May 2: STEMM Equity and Excellence Strategy Workshop**, at the STEM Learning Ecosystems Community of Practice 2023 Convening, Jacksonville, FL

**May 23: Advancing STEMM Equity and Excellence in the Tech Sector Summit**, hosted by Snap Inc, Los Angeles, CA

**July 12: Northwest STEMM Summit - Achieving Equity and Excellence**, hosted by Micron Technology, Boise, ID

**August 3: Building an Equitable and Excellent STEMM Workforce Summit**, hosted by 3M, St Paul, MN

**August 5: Chicagoland Summit on STEMM Equity and Excellence**, hosted by the Museum of Science and Industry, Chicago, IL

**August 25: Building STEMM Research Capacity within HBCUs Summit**, hosted by Spelman College, Atlanta, GA

**October 24: Cross-Sector STEMM Equity and Excellence Summit**, hosted by Lyda Hill Philanthropies and the National Math and Science Initiative, Dallas, TX

**November 3: Southwest STEMM Equity and Excellence Summit**, hosted by the Arizona State University, Tempe, AZ

\*See Appendix A for additional details on events.



# 2023 ACCOMPLISHMENTS



## PHASE 3 Fine-tuning the National Strategy

### Open Comment Period


Following the series of convenings held across the country, SOA collated feedback gathered from attendees, partners, and Advisory Council members to create the co-constructed National Strategy.

In October, SOA released the draft National Strategy for public input, launching a monthlong public open comment period to ensure that every stakeholder had a chance to make their voice heard.

During the open comment period, SOA solicited written feedback online and held five virtual town halls, each dedicated to one of the key five pillars that make up the National Strategy.

Feedback received in SOA’s convenings animated the strategy, infusing on-the-ground experiences and ensuring the representation of perspectives from across all sectors. Reactions gathered during the town hall meetings helped secure additional buy-in from the public regarding SOA’s approach to advancing equity and excellence in the American STEM enterprise.





## 2023 BY THE NUMBERS:

**175+**  
PARTNERS

**17**  
CONVENINGS

**\$1.8B**  
IN  
COMMITMENTS

**1,500+**  
CO-  
CONSTRUCTORS

# 2024 OBJECTIVES & ACTIVITIES



## PHASE 4 Implementing the National STEM Equity Strategy

### SOA's 2024 goals include:



#### Release the National Strategy

The final version of *STEMM Equity and Excellence 2050: A National Strategy for Progress and Prosperity*, which will represent the culmination of a year of deep conversation with leaders and partners across the STEM ecosystem, will be launched in spring 2024 alongside a major national summit.



#### Map Activities Aligned to the National Strategy

Ahead of the summit and the National Strategy's release, SOA will garner and map new partner commitments aligned with the strategy. Commitments mapped onto the National Strategy will be announced alongside the summit. This effort will be part of SOA's longer term efforts to map and track relevant work, including landscaping existing work among partners and updating mapping in real time.



#### Launch Implementation via Anchor Partners

Alongside the release of the National Strategy and the summit, SOA will announce a cohort of anchor partners that will drive forward implementation efforts. Each section of the National Strategy will have one or multiple SOA partner organizations serving as the anchor, which will be tasked with coordinating planning and action among relevant stakeholders. Anchor partners will be supported by SOA's network and infrastructure, and will serve as key leaders in advancing progress. SOA will also work with anchor partners to identify and build out needs for novel research, data collection, and metrics development.



#### Expand and Deepen the Movement

In 2024, SOA will continue to grow the Alliance, compelling more actors to the table and deepening the movement for STEM equity and excellence. This will include ongoing efforts to bring in more actors and commitments, including by targeting underrepresented industries, sectors, and regions. SOA will also engage more policymakers and government stakeholders, including by coordinating between the National Strategy and forthcoming White House STEM equity plans.



#### Track Progress Metrics

SOA will work with anchor partners to develop systems for tracking and publicly sharing progress towards the metrics and goals laid out in the National Strategy.



#### Expand the SOA team

In 2024, SOA will expand its backbone team with a full-time project manager and director to lead the Alliance into the implementation phase.



## APPENDIX A: Events

Additional detail on SOA's 2023 convenings is included below:

### **February 24, Achieving STEMM Equity and Excellence in Postsecondary Education Summit, hosted by Morgan State University, Baltimore, MD**

- The inaugural convening on Achieving STEMM Equity and Excellence in Postsecondary Education featured facilitated workshops that provided participants the opportunity to participate in the co-construction of a shared National Strategy, with a particular eye towards goals and strategies that will inspire progress within the postsecondary field.

### **March 4, SOA Listening Session at the AAAS Annual Meeting, Washington, DC**

- The event, which was attended by members of the scientific community, included a SOA-hosted listening session that asked participants for feedback and ideas related to the national strategy. The conversation covered a range of topics, including, K-12 STEMM teacher production and curriculum, post-secondary STEMM environments, and the importance of data and accountability.

### **April 18: Achieving STEMM Equity and Excellence in Communities and Schools Summit, hosted by the New York Hall of Science, New York City**

- The convening on Achieving STEMM Equity and Excellence in Communities and Schools at NYSCI featured facilitated workshops that provided participants with the opportunity to co-construct the National Strategy, with a particular eye towards the role of community, informal, and out-of-school sectors. The event included galvanizing remarks – including a video address from Governor Kathy Hochul of New York.

### **May 2, STEMM Equity and Excellence Strategy Workshop, at the STEM Learning Ecosystems Community of Practice 2023 Convening, Jacksonville, FL**

- At the STEM Learning Ecosystems Community of Practice 2023 Convening managed by the Teaching Institute for Excellence in STEM (TIES), SOA hosted a workshop that brought together over 40 cross-sector partners representing regional STEMM ecosystems from all around the country to discuss the role of informal education organizations, K-12 educators, and postsecondary institutions in creating equitable STEMM learning opportunities.

### **May 23: Advancing STEMM Equity and Excellence in the Tech Sector Summit, hosted by Snap Inc, Los Angeles, CA**

- The convening on Advancing STEMM Equity and Excellence in the Tech Sector brought together a diverse group of organizations and partners to discuss equity and excellence in the technology field. More than 100 leaders in tech, industry, education, philanthropy, and community organizations participated in a workshop to co-construct a national strategy aimed at creating more equitable opportunities in STEMM.

### **July 12: Northwest STEMM Summit - Achieving Equity and Excellence, hosted by Micron Technology, Boise, ID**

- The Northwest STEMM Summit brought together federal decision makers with leaders from industry, state-level STEMM agencies, higher education institutions, education organizations, research institutions, and more to hear from prominent public and private sector leaders, learn about Micron's new equity-minded initiatives, and provide value input on the National Strategy.

### **August 3: Building an Equitable and Excellent STEMM Workforce Summit, hosted by 3M, St Paul, MN**

- The Building an Equitable and Excellent STEMM Workforce Summit offered an important opportunity for cross-sector stakeholders to discuss and create strategies for driving greater equity, opportunity, and innovation in the science and technology ecosystem regionally and nationally. Attendees heard from an array of leaders including Congresswoman Betty McCollum and 3M's Corporate Scientist and Chief Science Advocate Jayshree Seth.

### **August 5: Chicagoland Summit on STEMM Equity and Excellence, hosted by the Museum of Science and Industry, Chicago, IL**

- The Chicagoland Summit brought together federal decision makers with STEMM leaders from community organizations, education non-profits, K-12 systems, higher education, government, and industry. The Summit provided participants the opportunity hear from prominent public and private sector leaders.

## APPENDIX A: Events Continued

### **August 25: Building STEMM Research Capacity within HBCUs Summit, hosted by Spelman College, Atlanta, GA**

- SOA and Spelman convened academic, philanthropic, and governmental leaders on advancing equity and excellence in the STEMM ecosystem by bolstering research and innovation at historically Black colleges and universities (HBCUs). This convening brought together leaders to network, identify barriers to STEMM equity at HBCUs, and provide input on the National Strategy.

### **October 24: Cross-Sector STEMM Equity and Excellence Summit, hosted by Lyda Hill Philanthropies and the National Math and Science Initiative, Dallas, TX**

- The Cross-Sector STEMM Equity and Excellence Summit engaged STEMM leaders, researchers, practitioners, educators, and others in discussions of innovative strategies to promote equity and excellence in national and regional STEMM sectors. The event included a keynote address by France Cordova, announcements of the results of new STEMM equity studies, and interactive group dialogues.

### **November 3: Southwest STEMM Equity and Excellence Summit, hosted by the Arizona State University, Tempe, AZ**

- The Southwest STEMM Equity and Excellence Summit brought together STEMM leaders, researchers, practitioners, educators, and others to share innovative strategies to promote equity and excellence in national and regional STEMM sectors. The summit fostered collaboration among state and local policymakers, community organizations, K-12 education, academia, industry leaders, and more.

## APPENDIX B: Deliverables and Resources

- [National Strategy For STEMM Equity and Excellence: Draft for Public Input](#)
- [SOA 2023-2024 Goals](#)
- [SOA Partner Application Form](#)
- **Convening Readouts:**
  - [Readout of Achieving STEMM Equity and Excellence in Postsecondary Education hosted by Morgan State University](#)
  - [Readout of Achieving STEMM Equity and Excellence in Communities and Schools hosted by New York Hall of Science](#)
  - [Readout of Achieving STEMM Equity and Excellence: Learning Ecosystems Community of Practice 2023 Convening](#)
  - [Readout of Achieving STEMM Equity and Excellence in the Tech Industry hosted by Snap Inc.](#)
  - [Readout of Northwest STEMM Summit - Achieving Equity & Excellence hosted by Micron Technology](#)
  - [Readout of Chicagoland Summit on STEMM Equity and Excellence hosted by Museum of Science and Industry, Chicago](#)
  - [Readout of Building an Equitable and Excellent STEMM Workforce Summit hosted by 3M](#)
  - [Readout of Summit on Building STEMM Capacity Within HBCUs hosted by Spelman College](#)
  - [Readout of Cross-Sector STEMM Equity and Excellence Summit hosted by Lyda Hill Philanthropies and NMSI](#)
  - [Readout of Southwest Equity and Excellence Summit hosted by Arizona State University](#)
- [Readout of Open Comment Period Town Halls](#)