



OFFICE OF SCIENCE AND TECHNOLOGY POLICY

Notice of Request for Information; National Strategic Plan for Advanced Manufacturing

AGENCY: Office of Science and Technology Policy (OSTP).

ACTION: Request for Information.

SUMMARY: On behalf of the Subcommittee on Advanced Manufacturing of the National Science and Technology Council, the Office of Science and Technology Policy (OSTP) requests input from all interested parties on the development of a National Strategic Plan for Advanced Manufacturing. Through this Request for Information (RFI), OSTP seeks input from the public regarding Federal programs and activities to advance United States manufacturing competitiveness, including advanced manufacturing research and development that will create jobs, grow the economy across multiple industrial sectors, strengthen national security, and improve healthcare. The public input provided in response to this RFI will inform the development of the National Strategic Plan for Advanced Manufacturing.

DATES:

Responses are due by September 30, 2025.

ADDRESSES:

Interested individuals and organizations should submit comments electronically via the Federal eRulemaking Portal at <http://www.regulations.gov> by searching the Docket ID number NIST-2025-0004. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at <http://www.regulations.gov> by selecting the Docket ID number. Information on how to use www.regulations.gov, including instructions for accessing agency documents, submitting

comments, and viewing the docket, is available on the site under “FAQ”

(<https://www.regulations.gov/faq>).

Instructions:

Response to this RFI is voluntary. Please note that all submissions received in response to this notice may be posted on <https://www.regulations.gov/> or otherwise released in their entirety.

Do not include in your submissions any copyrighted material; information of a confidential nature, such as personal or proprietary information; or any information you would not like to be made publicly available.

OSTP will not respond to individual submissions. A response to this RFI will not be viewed as a binding commitment to develop or pursue the project or ideas discussed. This RFI is not accepting applications for financial assistance or financial incentives.

Responses containing references, studies, research, and other empirical data that are not widely published should include copies of or electronic links to the referenced materials.

Responses from minors, or responses containing profanity, vulgarity, threats, or other inappropriate language or content will not be considered.

Comments submitted in response to this notice are subject to the Freedom of Information Act (FOIA). Please note that the United States Government will not pay for response preparation, or for the use of any information contained in a response.

FOR FURTHER INFORMATION CONTACT:

Please email the Advanced Manufacturing National Program Office at amnpo@nist.gov or call Said Jahanmir at 301-975-0844.

SUPPLEMENTARY INFORMATION:

The Trump Administration is committed to revitalizing American manufacturing, creating new jobs, and growing the economy nationwide. There is a need to accelerate research and development, dismantle regulatory barriers, strengthen domestic supply

chains and manufacturing, spur robust private sector investment, and advance American companies in global markets to ensure the United States is the unrivaled world leader in advanced technologies.

The Consolidated and Further Continuing Appropriations Act, 2015, incorporating the Revitalize American Manufacturing and Innovation Act of 2014, revised 42 U.S.C. 6622 (<https://www.govinfo.gov/content/pkg/USCODE-2023-title42/html/USCODE-2023-title42-chap79-subchapII-sec6622.htm>) to direct the National Science and Technology Council (NSTC) to develop and update, in coordination with the National Economic Council, a strategic plan to improve government coordination and provide long-term guidance for Federal programs and activities in support of United States manufacturing competitiveness, including advanced manufacturing research and development (R&D). Pursuant to this requirement, NSTC seeks to develop a National Strategic Plan for Advanced Manufacturing (“Plan”) that will provide the framework to create jobs, grow the economy across multiple industrial sectors, strengthen national security, and improve healthcare.

Advanced manufacturing is a family of activities that (1) depend on the use and coordination of information, automation, computation, software, sensing, and networking, and/or (2) make use of cutting-edge materials and emerging capabilities enabled by the physical and biological sciences, such as nanotechnology, chemistry, and biology. It involves both new ways to manufacture existing products and the manufacture of new products emerging from new advanced technologies.

The Subcommittee on Advanced Manufacturing has commenced the development of the Plan and, pursuant to 42 U.S.C. 6622, is soliciting public input through this RFI to obtain recommendations from a wide range of stakeholders, including representatives from manufacturing companies, academia, and other relevant organizations and institutions.

The public input provided in response to this RFI will inform the development of the Plan.

QUESTIONS TO INFORM DEVELOPMENT OF THE 2026 PLAN:

OSTP seeks responses to the following questions to improve government coordination and provide long-term guidance for Federal programs and activities, including advanced manufacturing R&D, to advance the United States manufacturing competitiveness.

1. a. Which emerging science and technology areas (e.g., artificial intelligence) will be key to the next generation of innovative advanced manufacturing technologies, and how will they impact advanced manufacturing?
- b. What are the primary challenges and barriers that need to be addressed to ensure the successful integration and widespread adoption of emerging technology in manufacturing?
2. a. Which disruptive manufacturing technologies (e.g., additive, nanotechnology, biotechnology) hold the potential to eliminate reliance on foreign sources for critical minerals and materials, and how will they do that?
- b. What are the technical challenges and barriers associated with implementing these technologies at an industrial scale, and how can they be addressed?
3. a. What should be the near-term and long-term technology R&D priorities for advanced manufacturing, reasons for those priorities, key objectives based on those priorities, the timeframe for achieving objectives, and the metrics for assessing progress toward the objectives?
- b. What are the major technical challenges to achieving the priorities identified in response to 3a, and how can they be mitigated to ensure timely progress?
4. a. What are examples of U.S. manufacturing-related technological, market, or business challenges that may best be addressed by public-private partnerships and are likely to attract both participation and primary funding from industry?

- b. How can public-private partnerships be structured to overcome potential hurdles and foster successful collaboration?
5. a. How can Federal agencies and federally-funded R&D centers supporting advanced manufacturing R&D facilitate the transfer of research results, intellectual property, and technology scale-up into commercialization and manufacturing to benefit all Americans and ensure economic and national security?
- b. What are the key challenges in translating research findings into commercially viable manufacturing processes and products, and how can they be overcome?
6. a. What are the main challenges in attracting, training, and retaining a skilled workforce for advanced manufacturing, and how can they be addressed?
- b. How can Federal agencies and federally-funded R&D centers develop, align, and strengthen all levels of advanced manufacturing training, certification, registered apprenticeships, and credentialing programs?
7. a. In what ways can the Federal government assist in the development of advanced manufacturing clusters and technology hubs nationwide, beyond funding needs?
- b. Is there a need for new or expanded advanced manufacturing clusters or technology hubs for the competitiveness of U.S. manufacturers, and if so, in what sectors or technologies?
- c. Should Federal incentives prioritize industry-specific advanced manufacturing clusters or instead focus on technology hubs centered on advanced technologies, critical components, and materials? If so, why?
8. a. What are the primary vulnerabilities and weaknesses within the current domestic supply chains?

- b. What programs and policies need to be implemented to develop and re-shore a resilient domestic advanced manufacturing supply chain and industrial base?
9. a. What are the biggest obstacles faced by small and medium-sized manufacturing companies in adopting advanced technologies to increase efficiency and productivity?
- b. How can Federal agencies assist these companies in adopting advanced technologies and participating in the establishment of robust and resilient domestic manufacturing supply chains?
10. What are examples of public-private partnership models (at the international, national, state, and/or local level) that could be expanded to facilitate manufacturing technology development, technology transition to market, and workforce development?
11. The current 2022-2026 National Strategy for Advanced Manufacturing has three top-level goals, each with objectives and priorities: (1) Develop and implement advanced manufacturing technologies; (2) Grow the advanced manufacturing workforce; and (3) Build resilience into manufacturing supply chains and ecosystems.
- a. Are these goals appropriate for the next 4-5 years? Why or why not?
 - b. What emerging needs or opportunities might require the addition of new top-level goals, and why?
12. Is there any additional information related to advanced manufacturing in the United States, not requested above, that you believe should be considered? If so, describe.

Dated: June 17, 2025.

Stacy Murphy,

Deputy Chief Operations Officer/Security Officer.

