

Welcome  
Introduction to  
National Strategic Plan  
for Advanced Manufacturing Town Hall





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# 2026-2030 National Strategic Plan for Advanced Manufacturing



Subcommittee on Advanced Manufacturing  
Committee on Technology  
National Science and Technology Council  
February 26, 2026

Robert Rudnitsky (DOC) and Huijuan Dai (DOE)



## **Importance of U.S. Manufacturing**

Current – Background on 2022–2026 National Strategic Plan

Future – Stakeholder RFI on 2026-2030 National Strategic Plan



# Importance of U.S. Manufacturing



## ***ECONOMY DRIVER***

Adds \$2.9 trillion to the economy, 9.7% of GDP



## ***EMPLOYMENT***

Directly employs over 13 million people



## ***R&D***

Contributes 52.9% of all private-sector research and development

## ***EXPORTS***

More than \$1.6 trillion

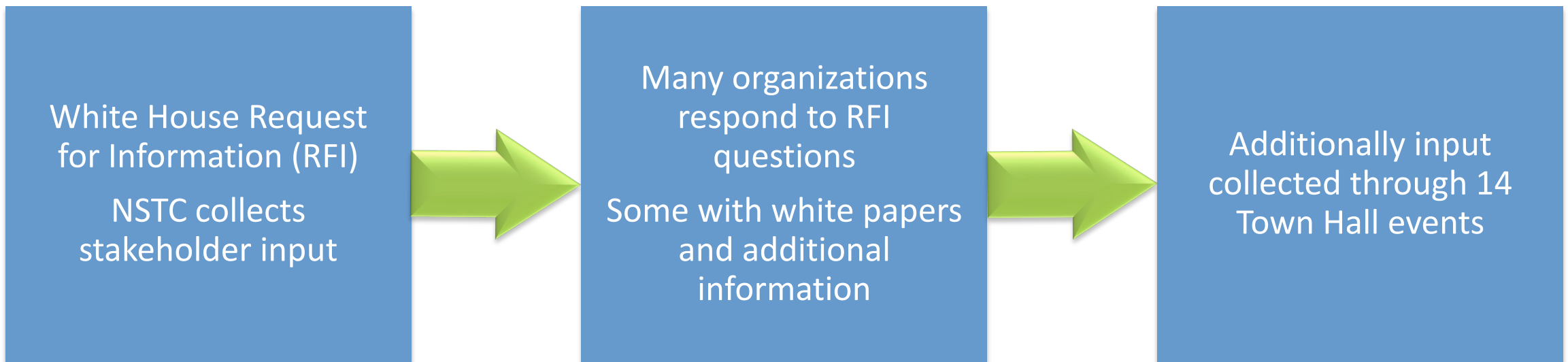


## ***INNOVATION***

Drives more innovation than any other sector



# 2022-2026 Strategy Developed with Stakeholder Input



Input received from nearly 1000 individuals and organizations

# 2022-2026 Strategic Plan Structure

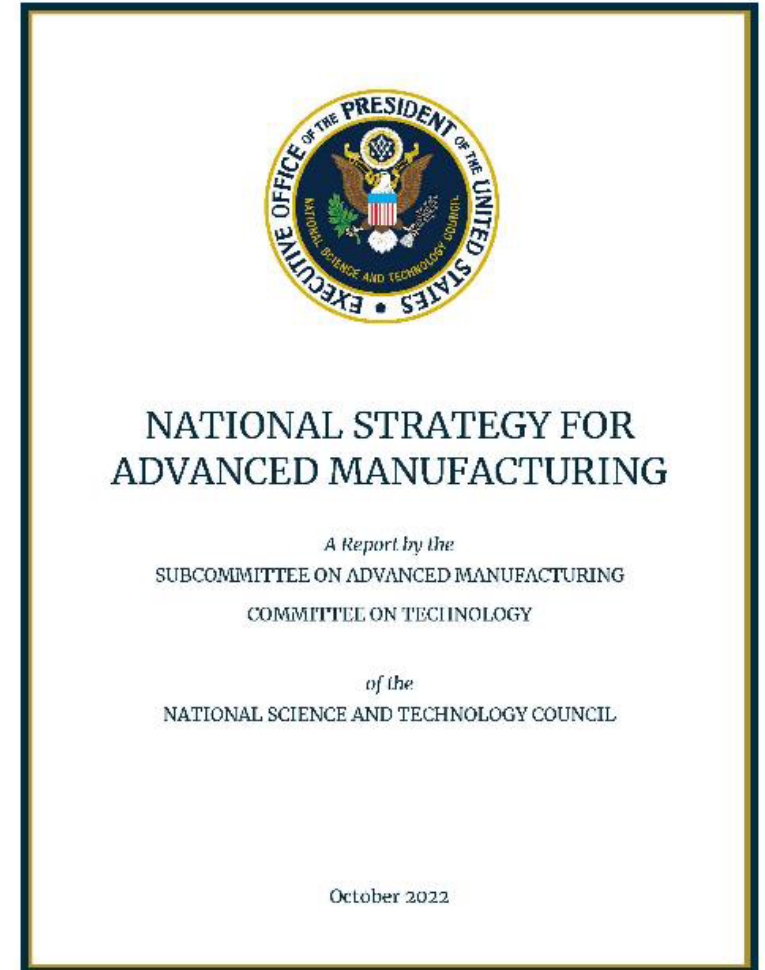


## Vision:

**United States leadership in Advanced Manufacturing** - grow the economy, create jobs, strengthen supply chains, ensure national security, and improve healthcare.

## National Goals:

1. Develop and implement advanced manufacturing **Technologies** – **5 Objectives with 18 priorities**
2. Grow the advanced manufacturing **Workforce** – **3 Objectives with 8 priorities**
3. Build resilience into manufacturing **Supply Chains and Ecosystems** – **3 Objectives with 11 priorities**



# Goal 1: Develop and Implement 18 National Adv Manufacturing Technology Priorities



## Enable Clean and Sustainable Manufacturing to Support Decarbonization

1. Decarbonization of Manufacturing Processes
2. Clean Energy Manufacturing Technologies
3. Sustainable Manufacturing and Recycling

## Accelerate Manufacturing for Microelectronics and Semiconductors

4. Nanomanufacturing of Semiconductors and Electronics
5. Semiconductor Materials, Design, and Fabrication
6. Semiconductor Packaging and Heterogeneous Design

## Implement Advanced Manufacturing in Support of the Bioeconomy

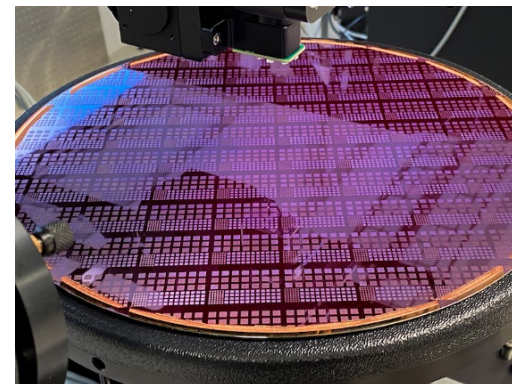
7. Biomanufacturing
8. Agriculture, Forest, and Food Processing
9. Biomass Processing and Conversion
10. Pharmaceuticals and Healthcare Products

## Develop Innovative Materials and Processing Technologies

11. High-Performance Materials Design and Processing
12. Additive Manufacturing
13. Critical Materials
14. In-Space Manufacturing

## Lead the Future of Smart Manufacturing

15. Digital Manufacturing
16. Artificial Intelligence in Manufacturing
17. Human-Centered Technology Adoption
18. Cybersecurity in Manufacturing



# Goal 2: Grow the Advanced Manufacturing Workforce via 8 National Priorities



## Expand and Diversify the Advanced Manufacturing Talent Pool

1. Promote Awareness of Advanced Manufacturing Careers
2. Engage Underrepresented Communities
3. Address Social and Structural Barriers for Underserved Groups

## Develop, Scale, and Promote Advanced Manufacturing Education and Training

4. Incorporate Advanced Manufacturing into Foundational STEM Education
5. Modernize Career Technical Education for Advanced Manufacturing
6. Expand and Disseminate New Learning Technologies and Practices

## Strengthen Connections Between Employers and Educational Organizations

7. Expand Work-Based Learning and Apprenticeships
8. Promote Industry-Recognized Credentials and Certifications

# Goal 3: Build Resilience into Manufacturing Supply Chains and Ecosystems with 11 National Priorities



## Enhance Supply Chain Interconnections

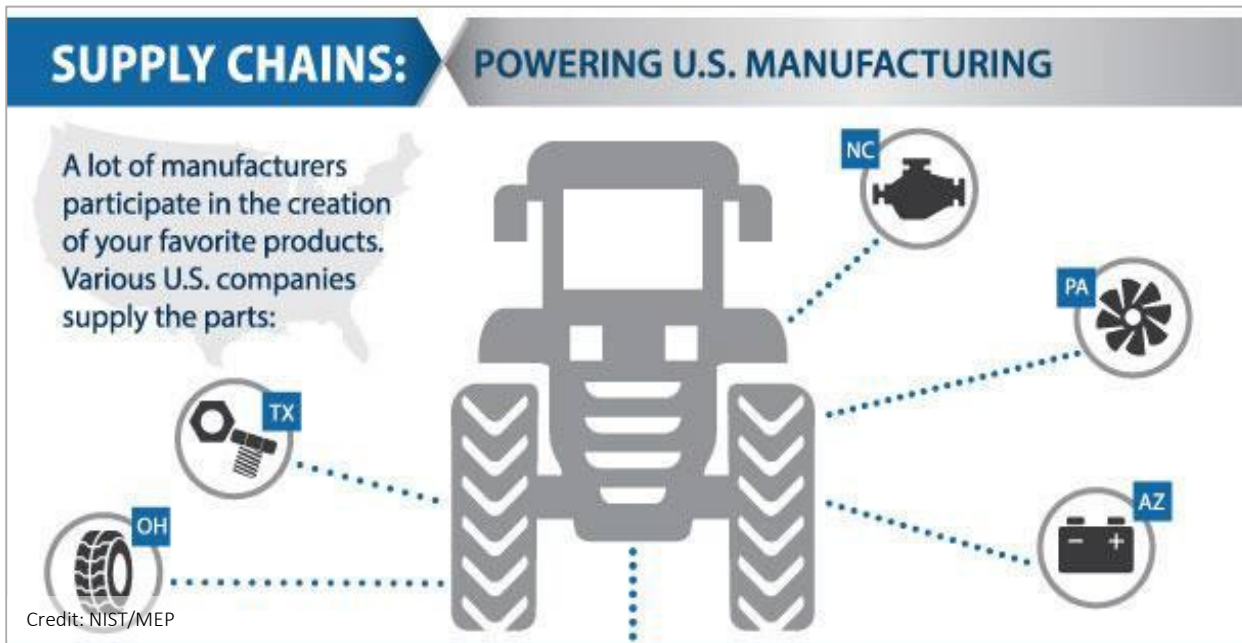
1. Foster Collaboration within Supply Chains
2. Advance Innovation for Digital Transformation of Supply Chains

## Expand Efforts to Reduce Manufacturing Supply Chain Vulnerabilities

3. Trace Information and Products Along Supply Chains
4. Increase Visibility into Supply Chains
5. Improve Supply Chain Risk Management
6. Stimulate Supply Chain Agility

## Strengthen and Revitalize Advanced Manufacturing Ecosystems

7. Promote New Business Formation and Growth
8. Support Small and Medium-sized Manufacturers
9. Assist Technology Transition
10. Build and Strengthen Regional Manufacturing Networks
11. Improve Public Private Partnerships





# Plans for Developing the 2026-2030 Strategic Plan

Administration Manufacturing Goals and Agenda



Stakeholder outreach, collect input via RFI, roundtable events around the nation



Launch interagency writing teams for each National Goal



Publish the new National Strategic Plan



# 2025 Request for Information (RFI)



Published June 20, 2025  
<https://www.federalregister.gov/documents/2025/06/20/2025-11379/notice-of-request-for-information-national-strategic-plan-for-advanced-manufacturing>



Responses requested through  
<https://www.regulations.gov/commenton/NIST-2025-0004-0001>

**Deadline extended to March 30, 2026.**



**FEDERAL REGISTER**  
The Daily Journal of the United States Government



Notice

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

A Notice by the Science and Technology Policy Office on 06/20/2025

PUBLISHED DOCUMENT: 2025-11379 (00 FR 26335)

- PDF
- Document Details
- Document Dates
- Table of Contents
- Public Comments
- Regulations.gov Data
- Sharing
- Print
- Other Formats
- Public Inspection

**DOCUMENT HEADINGS**

Office of Science and Technology Policy

**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 (D printed page 26336) 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.



# Your Input for the Strategic Plan

## Access SLIDO

### Three options:

- Scan QR code at right
- Click link in chat
- Go to Slido.com and use #MFGSTRATEGY26





# Your Input for the Strategic Plan

## Contribute your responses

- Questions are on the “Polls” tab.
- We will focus on selected questions.
- Scroll down and hit “Send” after each answer.
- Add your name or stay anonymous.

The screenshot shows a web browser window with the following elements:

- Browser tabs: "National Strategic Plan for Ad..."
- Address bar: "ap..."
- Navigation bar: "National Strategic Plan for Advanced Manufactu...", "Q&A", "Polls" (highlighted with an orange arrow).
- Question 11b: "11b) What emerging needs or opportunities might require the addition of new top-level goals, and why?" (22/23)
- Text input field: "Type your answer ..."
- Question 12: "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." (23/23)
- Text input field: "Type your answer ..."
- Green "Send" button (highlighted with an orange arrow).
- Dropdown menu: "Voting as Anonymous" (highlighted with an orange arrow).

# Question 1 for Public Input



- 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?

# Question 2 for Public Input



- 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?

# Question 3 for Public Input



- 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?

# Question 4 for Public Input



- 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?**

# Question 5 for Public Input



- 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?**

# Question 6 for Public Input



- 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?

# Question 7 for Public Input



- 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?

# Question 8 for Public Input



- 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?

# Question 9 for Public Input



- 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?**

# Question 10 for Public Input



**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?**

# Question 11 for Public Input



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?**

# Question 12 for Public Input



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.



# Thank You

## Contact:

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Federal Register  
Notice