

The National Institute of Standards and Technology (NIST) would like your feedback to help prepare a 2017 federal funding opportunity that will allow Hollings Manufacturing Extension Partnership (MEP) Centers and their partners to add capabilities to the MEP program, including projects to solve new or emerging manufacturing problems.

Specifically, NIST requests information from small and medium-sized U.S. manufacturers related to their needs in four areas: critical manufacturing technologies; supply chain; potential business services, including information services; and other technologies or services that would enhance global competition. NIST also requests recommendations for other critical issues that it should consider in strategic planning for future investments.

**NIST is seeking information that responds to one or more of the questions listed below. Responses should clearly indicate which question is being addressed.**

(1) What are the key problems and issues facing small U.S. manufacturers and their competitiveness and opportunities for growth in the near-term (1 to 2 years), mid-term (3 to 5 years) and/or long-term (more than 5 years)?

- 1 to 2 years – workforce capacity and capability – that is, the numbers of workers available factored by the skills required equals a significant shortage of qualified applicants for open positions.
- 3 to 5 years – Export penalties (imbalance between free trade into the US and restrictions in US trade abroad) and the potential of a “strong dollar”.
- Greater than 5 years – Cost of Capital/Inflation. Protectionist policies.

(2) What advanced manufacturing technologies are and/or will be needed by small U.S. manufacturers for the companies to be competitive and grow in the global marketplace in the near-term (1 to 2 years), mid-term (3 to 5 years) and/or long-term (more than 5 years)?

- 1 to 2 years – Information Technology to insure right product, at the right time, at the right place
- 3 to 5 years – Additive manufacturing technologies, digital piece manufacturing
- Greater than 5 years – Advanced materials technologies – smart materials

(a) What would be the appropriate Manufacturing Readiness Level [6] or Technology Readiness Level [7] for those technologies in order for small U.S. manufacturers to consider adoption?

- Manufacturing and Technology Readiness Levels would need to be mature for small businesses to afford both the acquisition and the adoption investments.

(b) What information will be required for small U.S. manufacturers to understand a technology or related group of technologies and the risks and opportunities associated with making or not making an investment in any given technology?

- Technical capability, investment cost, maintenance cost, in-use case studies

(c) How is the information about advanced manufacturing technologies best delivered to small U.S. manufacturers and/or MEP Centers that support those small U.S. manufacturers?

- Newsletters, Forums, directly via e-mail.

(3) What technologies and/or business models are important to small U.S. manufacturers as they choose and participate in any particular supply chain?

- Lean systems
- Strategic Planning and Policy Deployment business models
- Financial modeling

(4) What complementary business services, including information services, are and/or will be needed by small U.S. manufacturers and/or MEP Centers to take full advantage of advanced manufacturing technologies at the company or supply chain level?

- Outsourcing or 3PL models
- Forecasting/Demand Planning technologies connected to the Customer
- Global Partners and Advisors
- Engineering Consultants and Technology Integrators

(5) Are there any other critical issues that NIST MEP should consider in its strategic planning for future investments that are not covered by the first four questions?

**Please see the [MEP website](#) for more information. Responses will be accepted at [meprfi@nist.gov](mailto:meprfi@nist.gov) with the subject line “MEP Competitive Awards Program RFI Responses” until 11:59 p.m. Eastern on January 13, 2017.**