

# Manufacturing Technology Roadmap Grant Program

## FAQs

### Deadlines:

**When are proposals due?**

August 17, 11:59 pm (ET).

**Does the order of submission before the deadline have any impact on the review process?**

No. The order that proposals are received will NOT have any impact on the review process.

### Roadmaps:

**What is a technology roadmap?**

Technology roadmaps identify barriers that inhibit growth of U.S. advanced manufacturing within a specific technology area.

More specifically, a technology roadmap provides a shared vision (for all in the ecosystem) that starts where we are now and provides a list of milestones (barriers) that need to be overcome along the way you before you can get to your destination (envisioned state).

**Is roadmapping about how to identify challenges/barriers, or to list the challenges/barriers?**

Roadmapping is an activity that will result in a list of challenges and barriers that inhibit growth of advanced manufacturing in the U.S.

**Is importing machines considered part of a technology roadmap? Or is a technology roadmap geared more towards software?**

Neither. A technology roadmap is a living document about technology barriers to success for the ecosystem – not about a specific piece of equipment or a software application that needs to be purchased.

### Proposals/Scope:

**I see overlap in the results of this roadmapping and the "customer discovery" to become a National Science Foundation (NSF) Industry-University Co-Operative Research Center (IUCRC). This funding existing centers an opportunity to expand exponentially through the customer discovery involved in roadmapping. Would a center being funded through something like the ICURC program be eligible or considered overlap?**

A center could potentially be eligible provided that no federal funds are used in the preparation of the application and there is no duplication of efforts between activities funded by NSF (or other federal agencies) and those funded in this program. However, it is not possible to state definitively based on the information given.

**Would a situation where the advanced manufacturing technology has been developed but there are significant difficulties in implementing it by a segment of industry be appropriate for this grant?**

Yes. If the technology has been developed (proof-of-concept) yet the difficulty is in the scale-up, then a technology roadmap is the appropriate next move to identify the technology challenges and barriers that inhibit full scale-up.

**Is a company producing software used in autonomous cars part of the manufacturing industry? Is OT [Operational Technology] cyber for manufacturing considered inclusive?**

Many cross-cutting technologies with the potential to transform U.S. manufacturing industry remain unaddressed and may be the subject of applications under this funding opportunity. Software and cybersecurity for manufacturing are just two of the potential focus areas for manufacturers.

**I'm not sure I quite understood about the relationship to the Manufacturing USA institutes. If an institute has led technology roadmapping activities in their area (e.g., 3D printing) until now but they have no more funding for it or are not planning to continue their roadmapping activities, can this NIST award be a vehicle for another entity to continue that work - in this example, to build on their 3D printing roadmapping?**

Yes. It is acceptable to update or refresh older roadmaps including ones developed institutes in the Manufacturing USA network as long as your efforts do not duplicate other roadmapping projects already underway or completed. Proposed projects should clearly demonstrate how the envisioned effort complements or leverages previous efforts. Members from the original institutes may be consulted.

**In pharma manufacturing, generics are hindered in implementing advanced manufacturing, mainly due to limited access to know how - would a roadmap to facilitate implementation be appropriate?**

From this description, it sounds like the issue is a knowledge transfer challenge and if so, that would be more appropriate for a communication or marketing plan rather than a technology roadmap activity.

## Confidentiality and Intellectual Property

**Are there any guidelines and/or rules regarding confidentiality and/or Intellectual Property (IP) within any roadmap project?**

Roadmapping activities should bring together groups to identify the technological barriers to a thriving ecosystem. The group will identify challenges, not the solutions. As a result, roadmapping generally stays in the “pre-competitive” space so IP concerns are not relevant. However, if the group is concerned about confidentiality and IP, it is up to the group to establish rules for the members involved.

## Eligibility/Lead one proposal:

### **Are companies based in Puerto Rico eligible?**

Yes. Entities based in U.S. territories are eligible to apply.

### **My university has four separate campuses, each with a different leadership and Data Universal Numbering System (DUNS) numbers. Is the University limited to one proposal or may each campus lead a different proposal?**

If each campus is considered a separate legal entity with its own DUNS number and SAM.gov registration, then each campus may submit its own application.

### **Can you expand upon the "Entity" that can only apply once as a recipient? I work with a University. Can we only have one proposal acting as lead? Or can multiple professors act as an "entity" and submit proposals as lead?**

"Domestic non-Federal entities" are formally organized legal entities with unique DUNS numbers and SAM.gov registrations. If your university has only one unique DUNS number, then there can be only one submission for the university as a "lead".

## Funding & Budget:

### **Does the Cooperative Agreement funding instrument allow fee or profit?**

Profit or fee is not an allowable cost under awards made in this program.

### **Hypothetically, If University is lead, and I am an LLC, who works with the university, what are the scenarios that I can do work and also partake of award money?**

It is the responsibility of the applicant organization to determine its relationship with third parties participating in a project.

## Teaming

### **Are teams with existing Manufacturing Institutes permitted?**

Yes.

### **Do all partners need to be based in US?**

Any entity receiving funding under this program must be a domestic entity.

### **Is there a limit to the number of people that I can list as Co-PIs?**

You may list as many PI's as you want. Typically, teams list only those that will be part of your core team (i.e., those that will help manage, convene, organize, or otherwise have a significant role) and list the rest as partners. However, if politically it helps with your partners to list more people as co-PI's go ahead and do it.

## Old Proposals

### **May I see successful application from years past as a reference?**

This is the first year running this program so there are no previous successful applications. Note, however, that a [list of funded projects](#) from the Advanced Manufacturing Technology Consortia (AMTech) program included several roadmapping projects in 2013-2014. Keep in mind that the MfgTech Grant competition is not the same as the former AMTech program and roadmaps developed under AMTech might not be successfully funded today.

## TIPS for Reading the Funding Opportunity

### **I cannot find a section Section V.1.a, can you point me in the right direction for the, Substantive National Impacts evaluation criterion?**

The nomenclature for section references can be confusing if you are not used to them. Each dot essentially means to look for the subsection with that number or letter. Breaking down Section V.1.a:

- Section V. refers to V. **Application Review Information**
- The next “.1” refers to sub-section that starts with **1. Evaluation Criteria**
- The next “.a” refers to the sub-sub-section that starts with **a. Identification of Significant Technical Challenges with Substantives National Impacts (0-40 points)**

## Period of Performance

**The solicitation says the period of performance is "up to 18 months." Is it acceptable to propose a project that will take place over 12 months rather than over 18 months?**

Yes.

## Definitions

**Is there a NIST approved definition of “Technology” you can share?**

There is not a standard definition of “technology.”

**What is Advanced Manufacturing?**

Broadly defined *advanced manufacturing* is the use of innovative technology to improve products or processes, with the relevant technology being described as "advanced," "innovative," or "cutting edge."

## Webinar and other information

**Where can I find a copy of the webinar or additional information about the Manufacturing Technology Roadmap Program?**

<https://www.nist.gov/oam/manufacturing-usa-technology-roadmap-mfgtech-program>.

