OSTP / PCAST - Give us your ideas as to how the U.S. can enhance its advanced manufacturing capability.

The President's Council of Advisors on Science and Technology is conducting a study on how the nation can enhance its advanced manufacturing capabilities. Your input will help PCAST develop recommendations for the President on this topic. Provided below are a list of questions for which PCAST would like your input. They are organized in four broad categories: Development of New Manufacturing Technologies, Support for New Manufacturing Firms, Support for Existing Manufacturing Firms, and a National Manufacturing Strategy. Please provide your responses within these categories. This conversation will conclude on Tuesday, April 20, 2010. (http://pcast.ideascale.com/)

1. Development of New Manufacturing Technologies

- Public-Private Partnerships - Are public-private partnerships (e.g., consortia), in which government jointly funds projects with industry and often academia, a good mechanism to support new manufacturing technologies that are beyond the reach of individual firms? If not, why not?
- National Laboratories - Some advocate the expansion of the mission of the national laboratories to include R&D challenges relevant to a broad range of manufacturing industries. Is this an appropriate strategy? If not, why not?
- Innovation Budget - At some federal agencies, an "innovation budget" is established to promote breakthrough discoveries. Should such a budget be established for advanced manufacturing technology? If not, why not?
- Other Ideas - Do you have other ideas as to how to enhance the development of new manufacturing technologies?

2. Support for New Manufacturing Firms

- Translational Research - Do you believe that potentially valuable research at universities is not being fully utilized by industry? If so, why does this occur, and should federal agencies increase the emphasis on translational research to address this issue? If not, why not?
- Government-Industry-University Innovation Clusters - Given the success of some government-industry-university innovation clusters, should the federal government take the lead in establishing additional clusters to support new manufacturing firms, in particular? If not, why not?
- Small Firm Assistance - Should the federal government assist in the formation and advancement of small firms in the advanced manufacturing sector? If not, why not?
- Other Ideas - Do you have other ideas as to how to enhance the development of new manufacturing technologies?

3. Support for Existing Manufacturing Firms

- Cross-Cutting Technology Platforms - Should the federal government help form public-private partnerships to perform research on "horizontal," cross-cutting technology platforms (e.g., modeling, simulation) that are essential, but beyond the reach of individual firms? If not, why not?
- International Benchmarking - Should the government generate an international benchmarking effort to compare US manufacturing infrastructures (i.e., technology platforms) with those of competing nations? If not, why not?
- Manufacturing Workforce Training and Certification - Should government, in partnership with industry, sponsor programs in manufacturing training and certification at community colleges, technical schools, and colleges to enhance the nation's workforce? If not, why not?
- Other Ideas - Do you have other ideas as to how to enhance support for new manufacturing firms?

4. A National Manufacturing Strategy

- Strategy - Should the President create a national science- and technology–based manufacturing strategy as a pillar of US economic policy? If not, why not?
- Priorities - What actions should have highest priority?
- Cost-Effectiveness - Which actions are likely to be most cost-effective?