

NATIONAL ENGINEERING FORUM (NEF) REGIONAL DIALOGUE: ENGINEERING THOUGHT LEADERSHIP Columbus, Ohio at The Ohio State University October 31, 2013

Overarching Mission for Year One:

Lockheed Martin, the Council on Competitiveness, and the National Academy of Engineering launched the National Engineering Forum to address three engineering challenges in the United States: the *capacity* of our technical talent to fill current and future jobs, our engineering workforce's *capability* to address 21st century challenges, and our nation's *competitiveness* on the world stage. A series of regional dialogues will create grassroots networks of key influencers from academia, business, government, and the media, as well as students. Sustained input from these groups will make an impact on the NEF agenda, helping turn findings into action. The regional dialogues will culminate in a national cornerstone event.

The regional dialogues provide NEF with a nationwide survey of thought leaders, and enable a dynamic view of both the past and current state of engineering based on the expertise of those best positioned to help address the three engineering challenges. These sessions provide a platform for an engaging narrative that appeal to students and engineering professionals alike.

Key themes from the Columbus Dialogue:

Leaders from industry and academia participated in the NEF regional dialogue event, hosted by The Ohio State University in Columbus, Ohio. This dialogue examined the factors which helped the area become important to engineering and discussed the strengths and challenges in the region. Participants also explored how to better communicate the importance of engineering to ensure that the technical workforce has the required skills for our nation to remain competitive within the global environment.

Key action items that emerged in the dialogue:

- Increase awareness for engineering and science careers within minority groups
- Provide thought-provoking and challenging internship opportunities
- Collaboration between academia and industry to create sponsored research opportunities for students
- Assist with the preparedness of students so they are equipped with fundamental science and math skills needed for an engineering curriculum
- Consider ways to support teacher preparedness and expertise in STEM subjects
- Leverage social media platforms (i.e. Twitter, Instagram, Google+) to create awareness of engineering professions
- Emphasize the need for lifelong learning for engineering professionals
- Elevate engineering as a "cool" career through media outlets
- Focus attention on local infrastructure projects
- Empower students with fundamental understanding and the ability to apply the theory learned in a classroom setting with hands-on application of engineering concepts such as FIRST Robotics. 4-H Robotics, National Science Olympiad, etc.

