National Engineering Forum (NEF)
Engineering Thought Leadership
Pittsburgh, PA – Hosted by Carnegie Mellon University and University of Pittsburgh
October 1, 2014

The National Engineering Forum Movement

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 Pittsburgh Regional Dialogue

Ninety leaders from industry, academia and the media participated in the NEF regional dialogue event which was hosted by Carnegie Mellon University and the University of Pittsburgh at Phipps Conservatory. As the city of Pittsburgh is entering perhaps its third renaissance, so must the engineering community adapt to changing needs. While the steel industry is less dominant in the region than it has been historically, the need for a manufacturing workforce remains. The community needs to shift its focus to innovate in new and practical ways. Pittsburgh is not alone in recognizing that the perception of engineering needs to change and understanding the core skills that will provide viable engineering talent. Pittsburgh holds a significant sense of pride that will continue to welcome the future of engineering through the collaborative nature of the city.

Recommendations that emerged in the dialogue

- Improve access to undergraduate engineering internships and co-ops.
- Increase collaboration between industry and academia.
- Broaden engineering education so that it is not limited to one discipline or technical focus.
- Diversify the engineering workforce to ensure representation from a variety of backgrounds - gender, ethnic, and religious.
- Identify opportunities for elementary, middle, and high school students to experience science, engineering, and math concepts through hands-on activities.
- Elevate international graduates and hiring throughout engineering workforce.
- Continue to promote engineering professionals retention in Pittsburgh through inclusiveness.