



**National Engineering Forum (NEF) Regional Dialogue: Engineering Thought Leadership  
Greater Boston Region hosted by Olin College of Engineering  
October 27, 2014**

### Overarching Mission

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 is creating a grassroots network of key influencers from academia, business, government, the media, and 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 Boston regional dialogue

Leaders from industry, academia, government, and the media participated in the NEF regional dialogue event on the campus of the Olin College of Engineering, hosted the President of Olin College of Engineering, Richard K. Millar. Al Bunshaft, Senior Vice President at Dassault Systèmes Americas Corporation provided the keynote remarks for the regional dialogue. Participants traced the path to engineering and technological excellence in the Greater Boston region back to New England manufacturing excellence. Other themes included the need to keep students in the region post-graduation by changing the perception that Boston is too conservative for a dynamic start-up community; the success of the innovative Olin education model and the need to scale this model nationally; the distinctive ability of American engineers to be flexible and creative; and the importance of educating parents on engineering as an exciting and lucrative career path.

### Recommendations that emerged in the dialogue

- Evaluate engineering programs across the nation to target funding and scale the most effective programs.
- Require engineering students to imagine, create, and construct a novel prototype as part of their senior projects (i.e. require them to “make something”).
- Provide engineering students interesting projects early on to keep them interested enough to get through the difficult early years of engineering education.
- Create a more flexible engineering pipeline to accommodate differential rates of learning and development.

