

# What is Needed from the Engineering Community —— and —— How to Drive Change

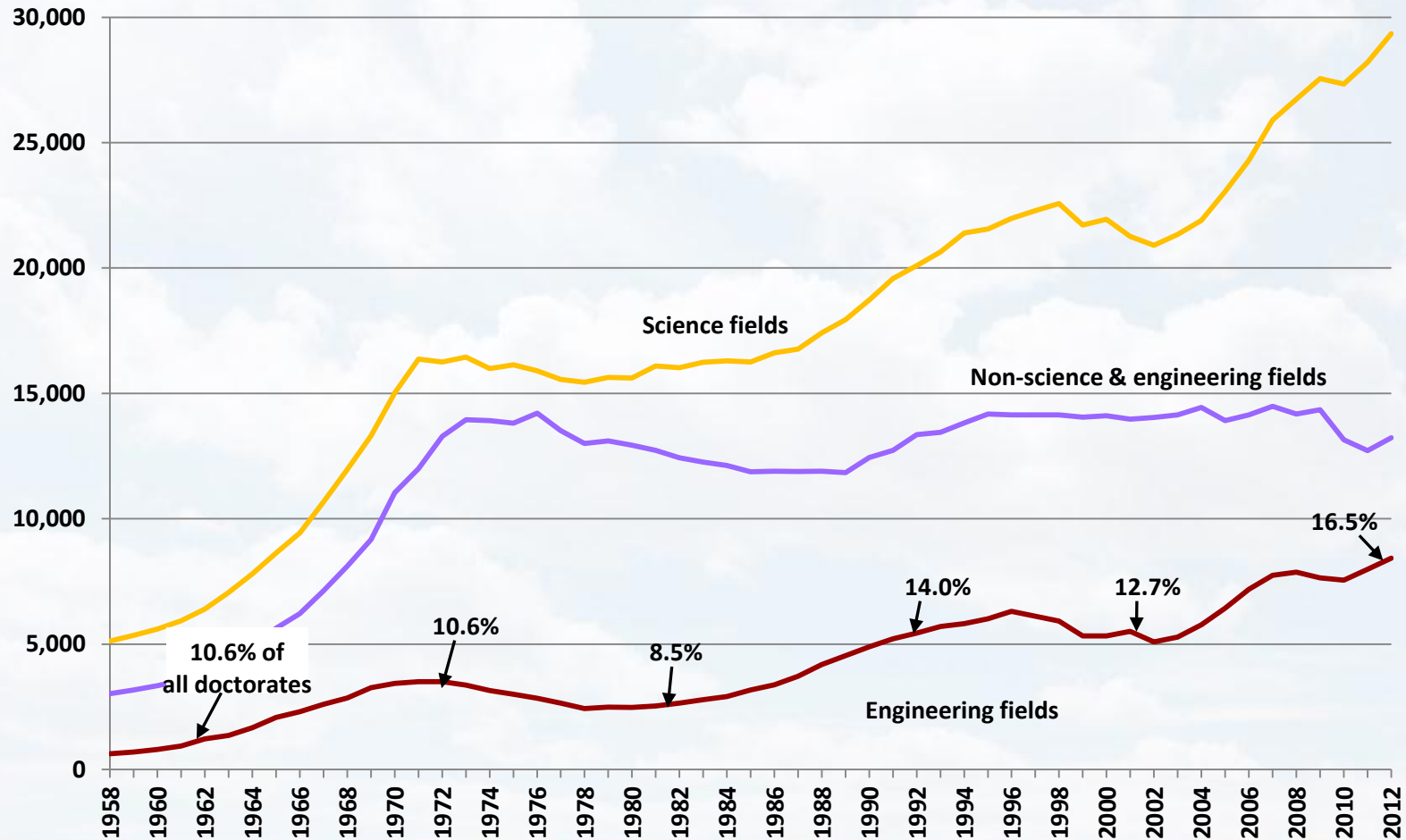


Dr. Cora B. Marrett, Deputy Director  
National Science Foundation

2014 NAE-AAES Convocation of the  
Professional Engineering Societies

April 28, 2014

# Doctorates Awarded by U.S. Colleges and Universities, by Field of Study: 1958 - 2012

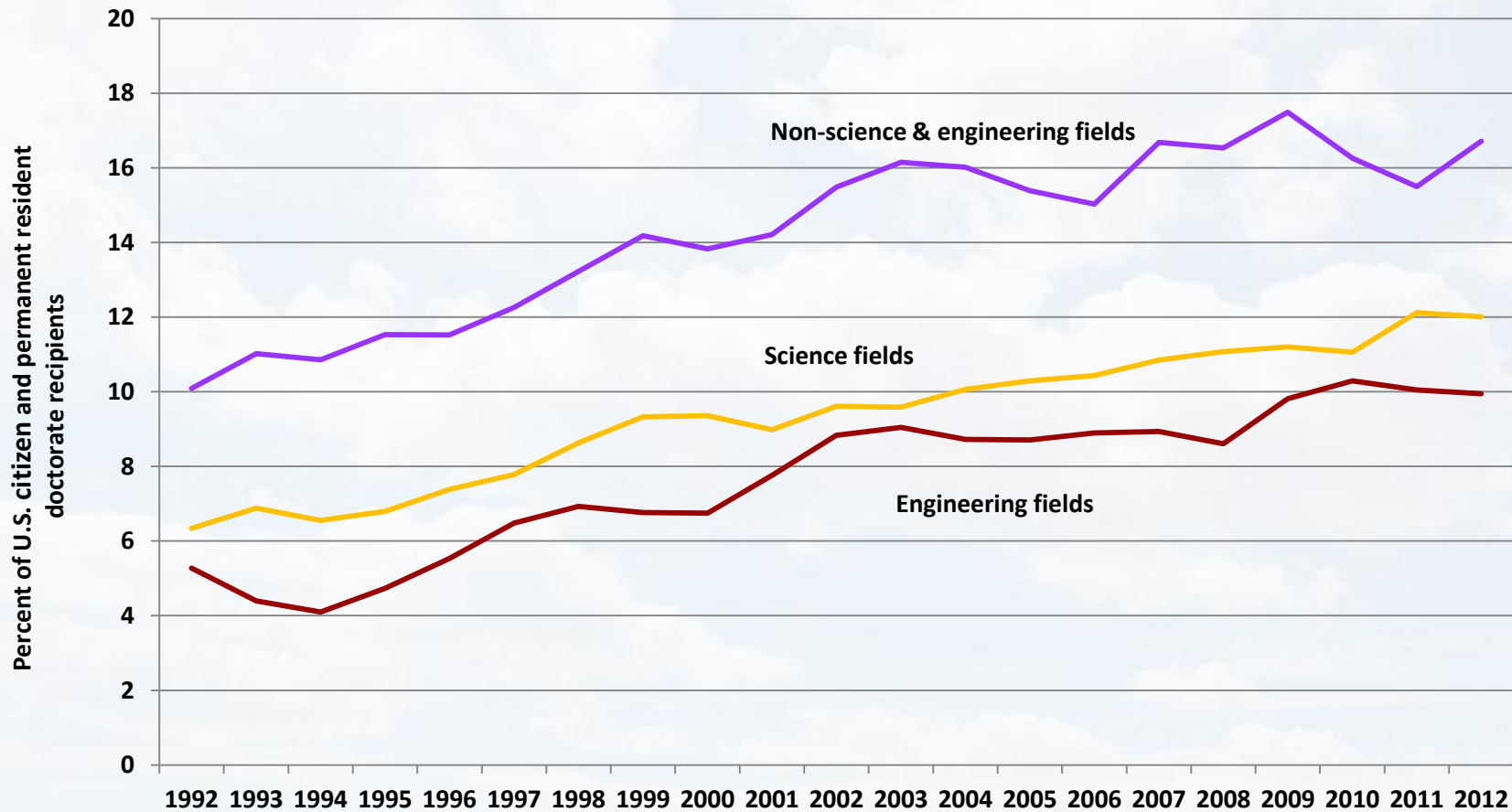


SOURCE: *Doctorate Recipients from U.S. Universities 2012*



NATIONAL SCIENCE FOUNDATION

# Percent of Doctorates Awarded to Underrepresented Minorities, by Field of Study: 1992-2012

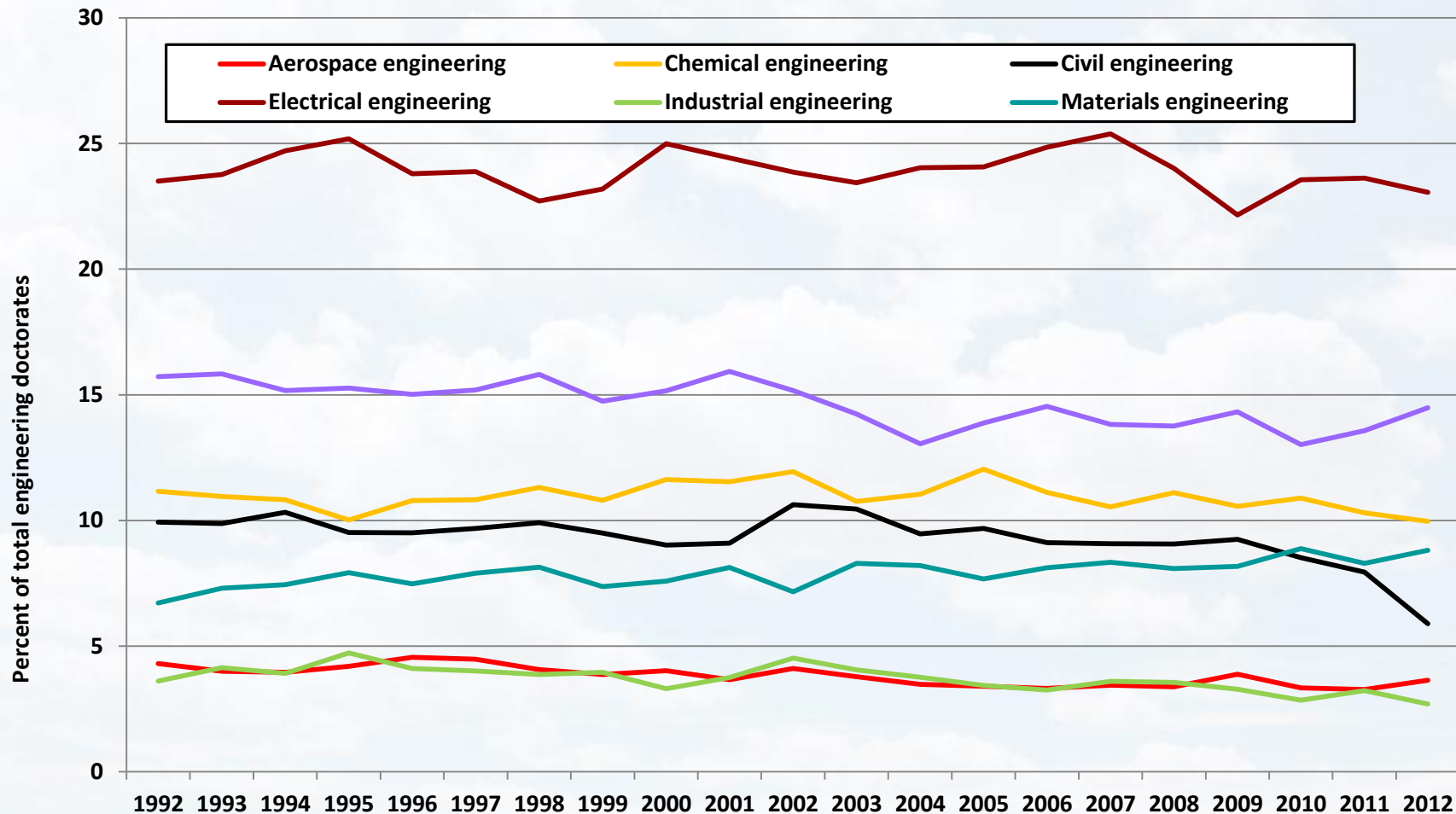


SOURCE: *Doctorate Recipients from U.S. Universities 2012*



NATIONAL SCIENCE FOUNDATION

# Engineering Doctorates Awarded, by Subfield: 1992 - 2012



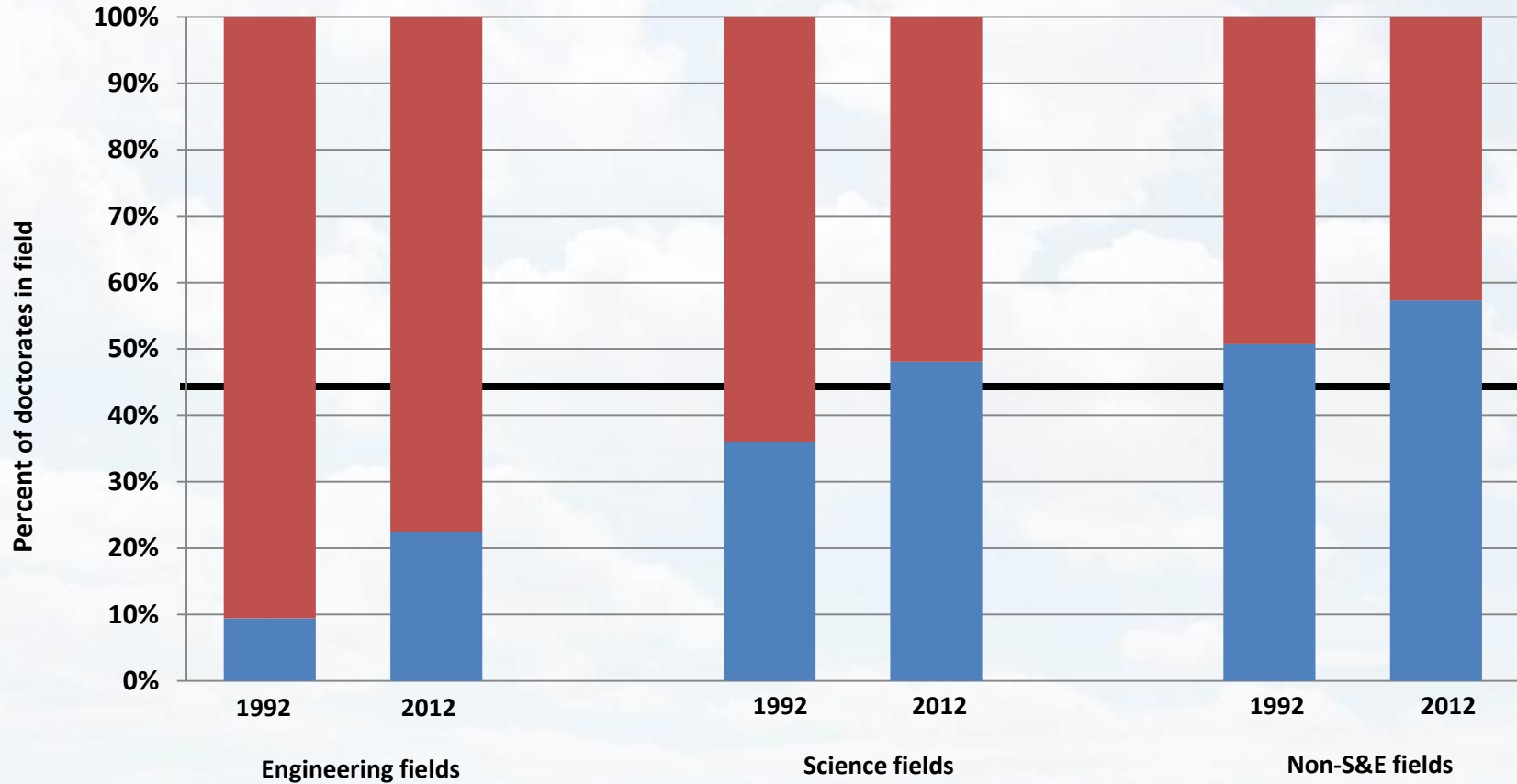
SOURCE: *Doctorate Recipients from U.S. Universities 2012*



NATIONAL SCIENCE FOUNDATION

# Doctorates Awarded, by Sex and Field of Study: 1992 - 2012

■ Women ■ Men

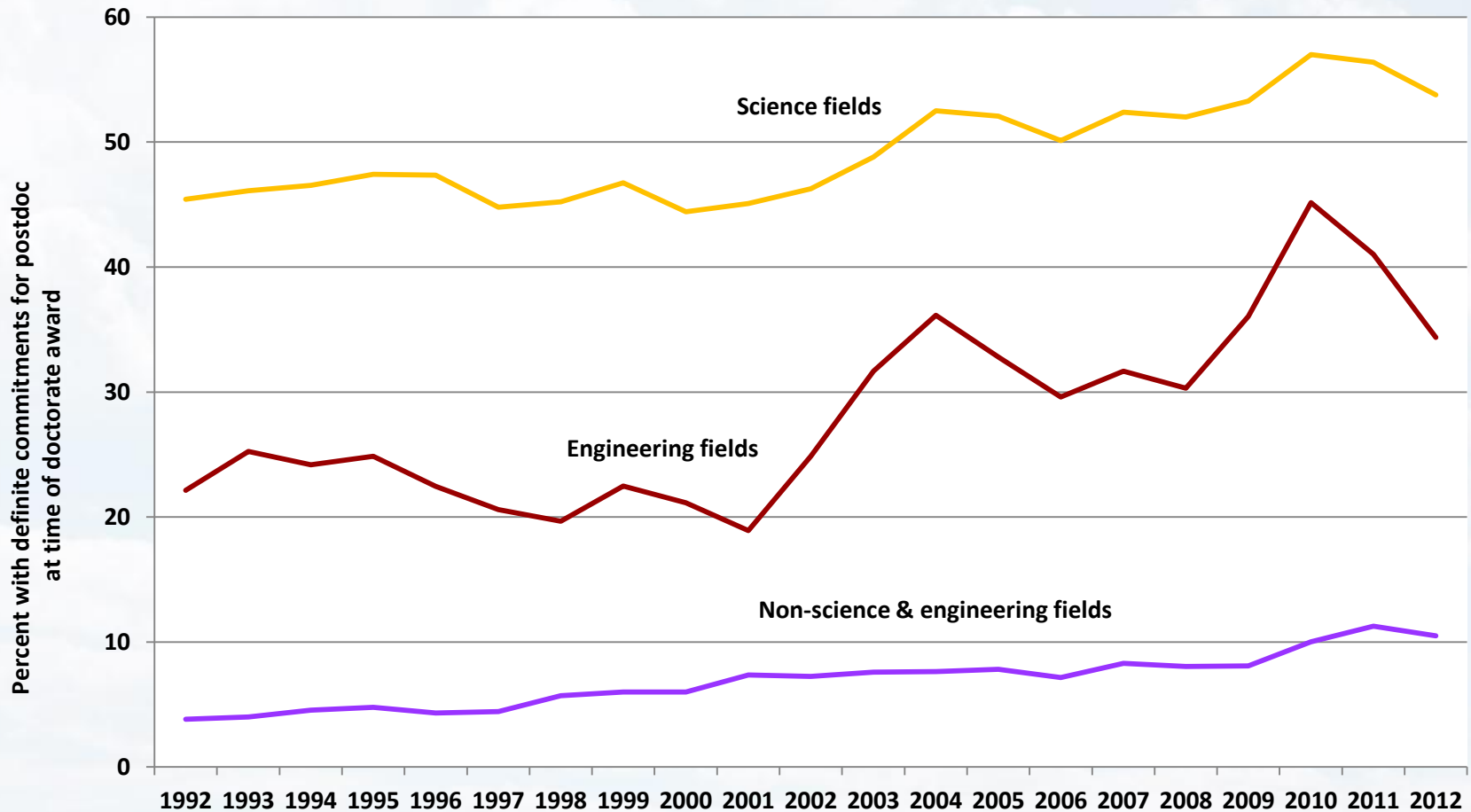


SOURCE: *Doctorate Recipients from U.S. Universities 2012*



NATIONAL SCIENCE FOUNDATION

# Postdoc Rate, by Field of Study: 1992 - 2012

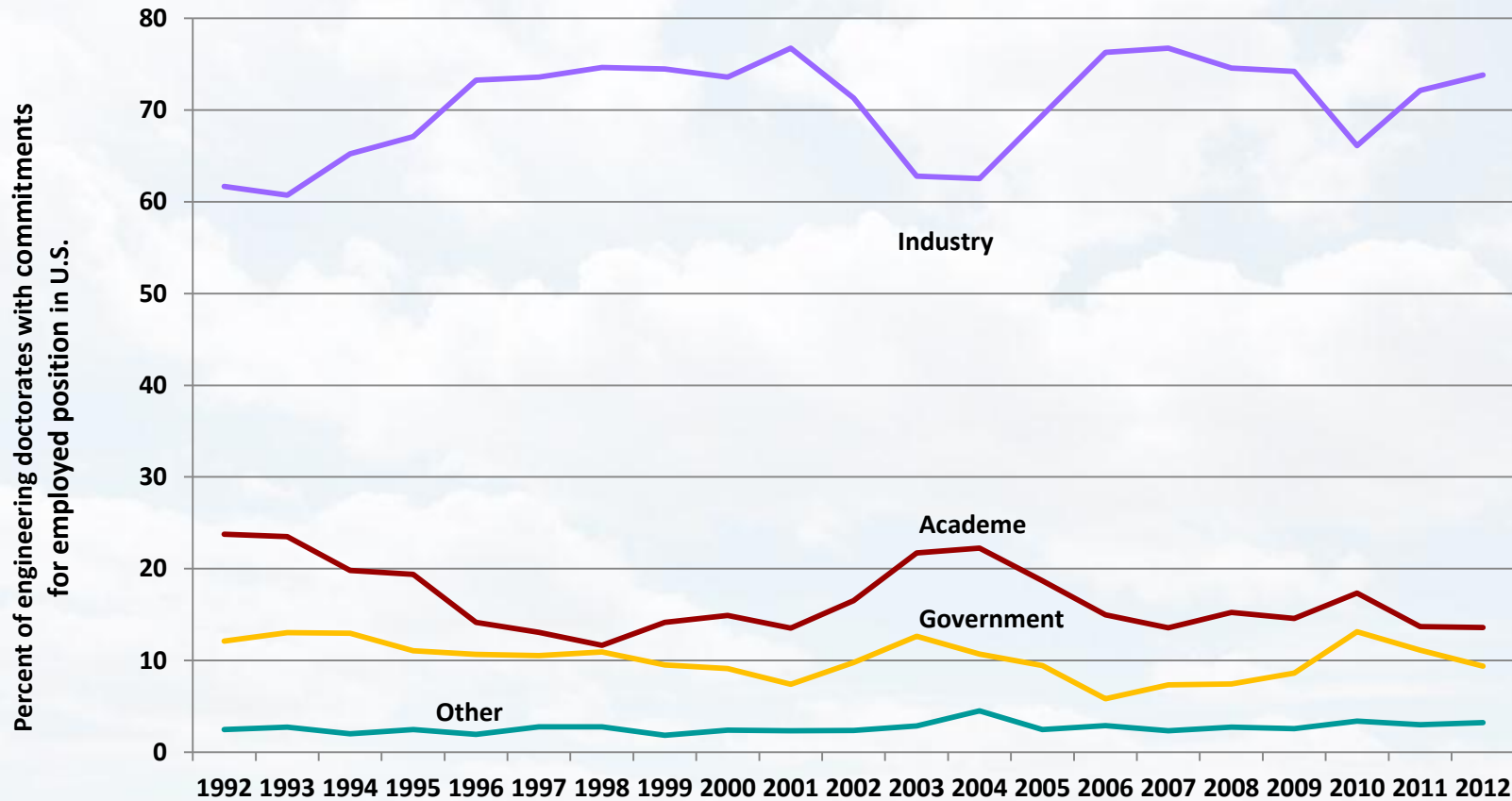


SOURCE: *Doctorate Recipients from U.S. Universities 2012*



NATIONAL SCIENCE FOUNDATION

# Employment Sector of Engineering Doctorates with Definite U.S. Employment Commitments: 1992 - 2012



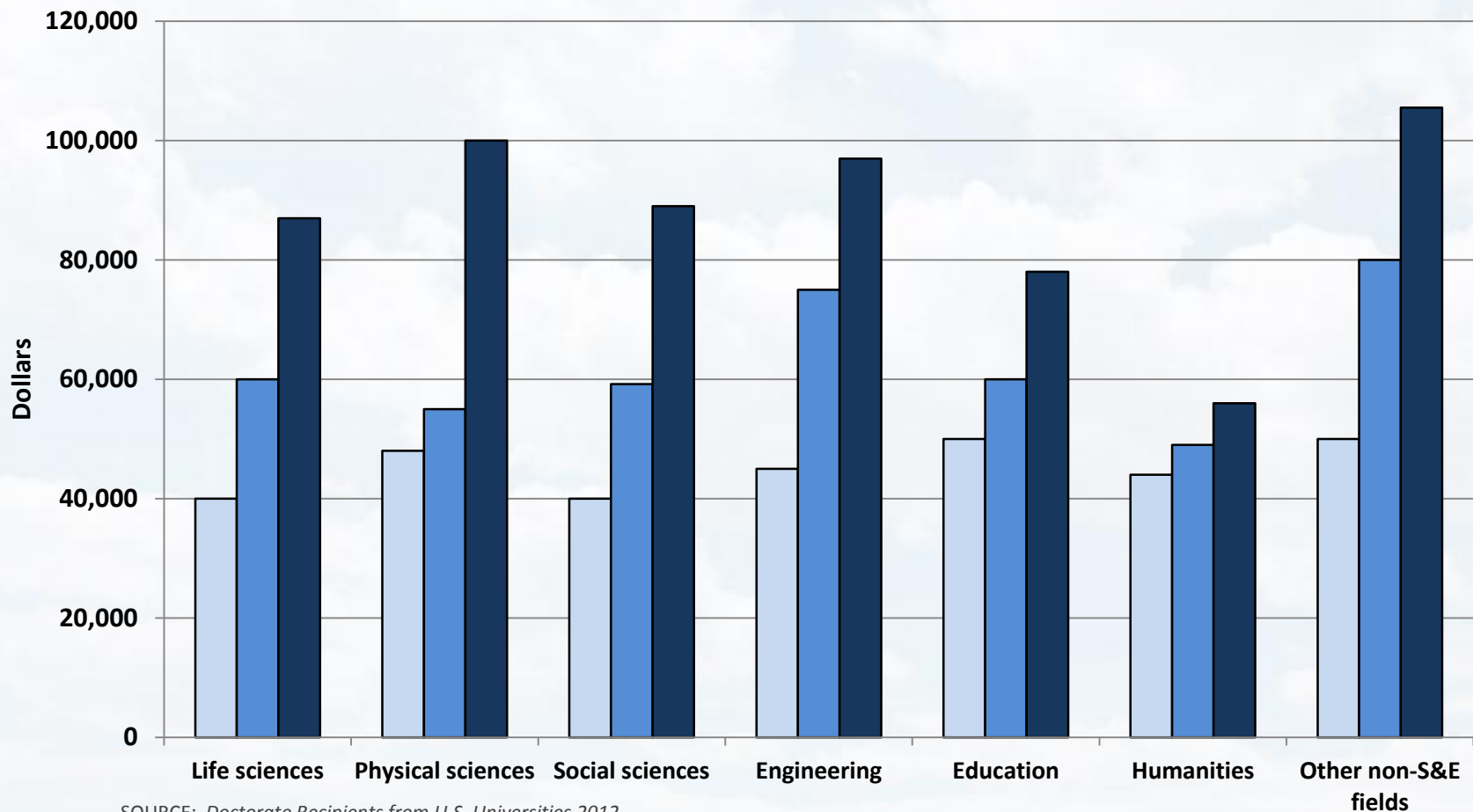
SOURCE: *Doctorate Recipients from U.S. Universities 2012*



NATIONAL SCIENCE FOUNDATION

# Median Basic Salary of Doctorate Recipient with Definite U.S. Commitments, by Position Type and Field of Study: 2012

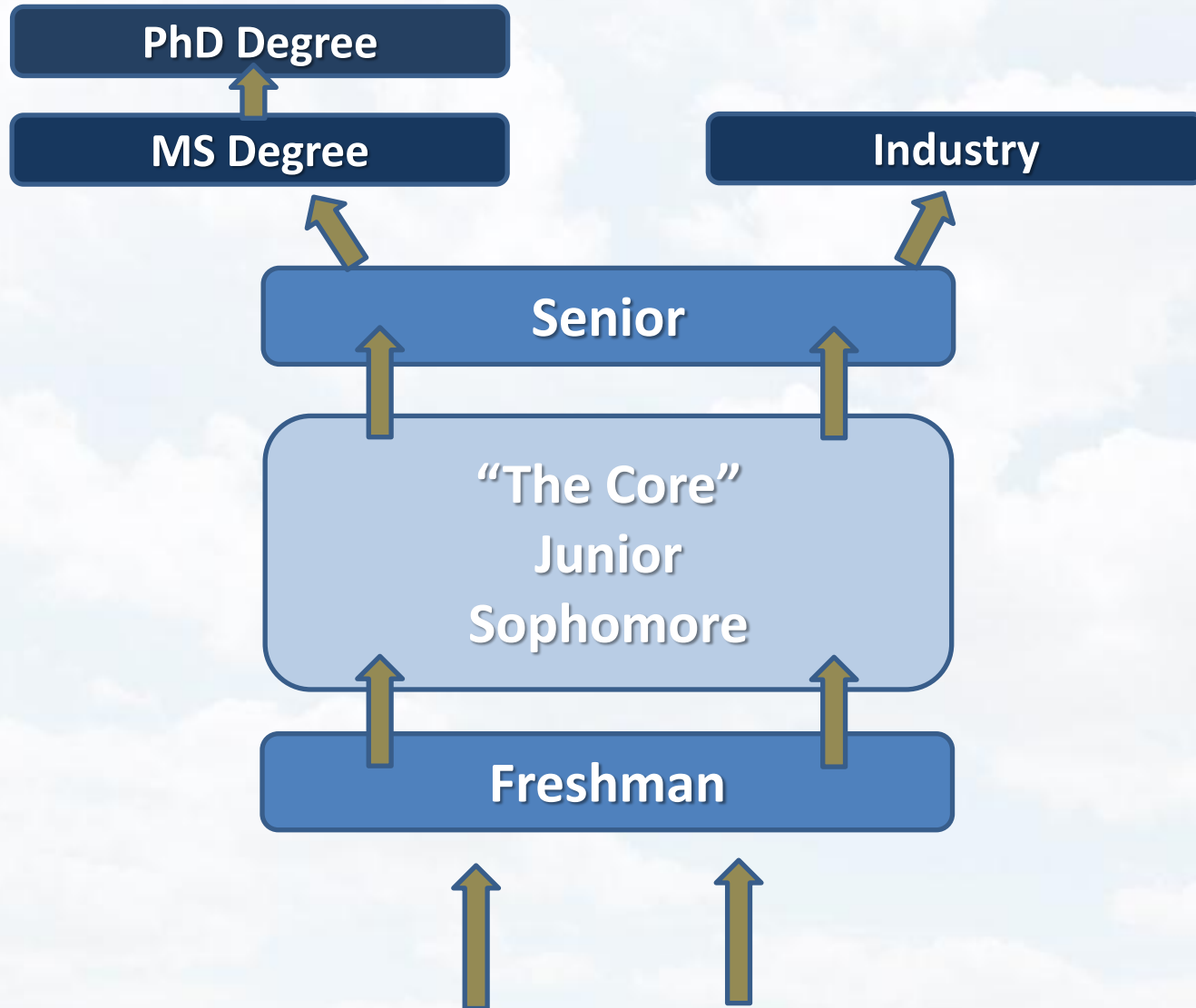
Postdoc   Employment in academe   Employment in industry



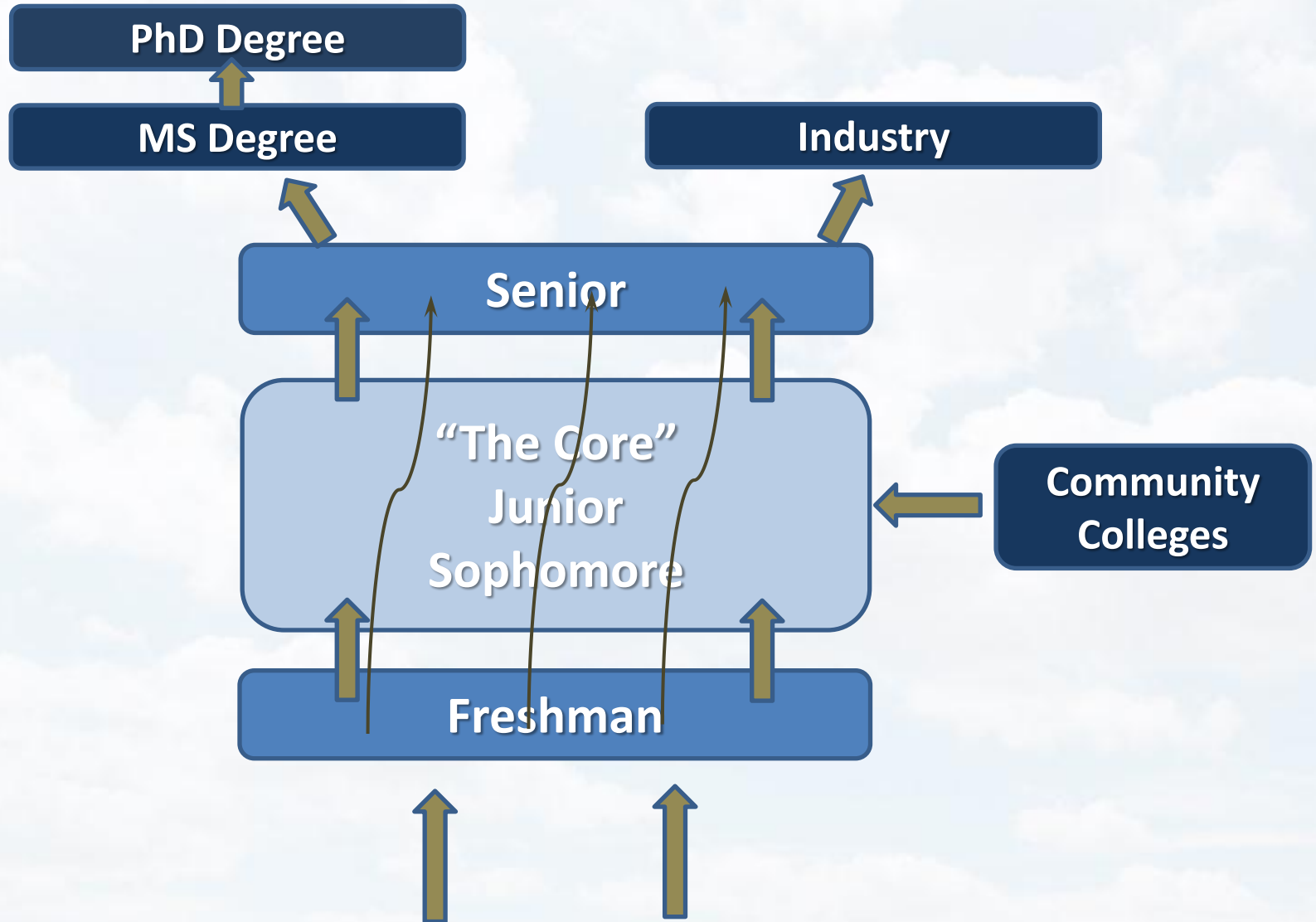
SOURCE: *Doctorate Recipients from U.S. Universities 2012*



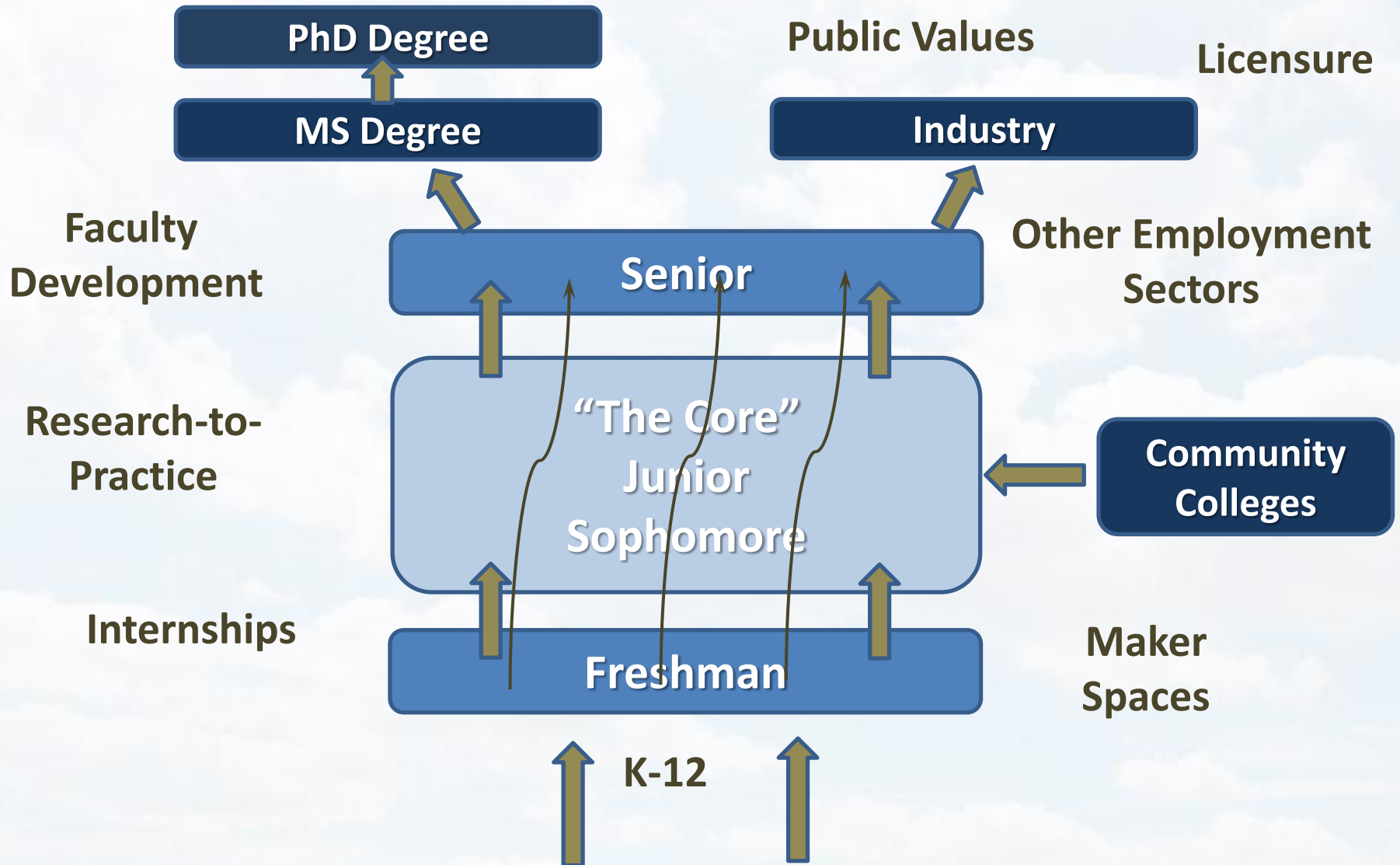
# “Linear” Path for Engineers



# “Non-Linear” Path for Engineers



# Continuing Engineer Development



# What is Needed from the Engineering Community —— and —— How to Drive Change



Dr. Cora B. Marrett, Deputy Director  
National Science Foundation

2014 NAE-AAES Convocation of the  
Professional Engineering Societies

April 28, 2014