BHEF BUSINESS-HIGHER EDUCATION FORUM®

Creating Solutions. Inspiring Action.®

Summer Member Meeting

June 24- 25, 2010

The Fairfax at Embassy Row
Washington, DC

AGENDA:
Thursday, June 24, 2010

6:00 - 7:00 P.M. **Chairman's Reception**

7:00 - 9:00 P.M. **Dinner**
Keynote Speaker
- **Dr. Cecilia Rouse**, Member, Council of Economic Advisors

AGENDA:
Friday, June 25, 2010

7:00 - 8:45 A.M. **Breakfast**
The Balcony Room

8:45 - 9:00 A.M. **Opening Remarks**
The Ballroom

9:00 - 10:00 A.M. **Opening Discussion**
Challenges and Opportunities for Implementing a College and Career Ready Reform Agenda
- **Molly Corbett Broad,** President, AmericanCouncil on Education
- **Dane Linn**, Director of the Education Division, The National Governors Association Center for Best Practices

Moderator:
- **Charles Reed**, Chancellor, The California State University

10:00 - 11:30 A.M. **Plenary Session I**
Fixing NCLB: A Blueprint for Reauthorizing ESEA
- **The Honorable Anthony W. Miller**, Deputy Secretary of Education, U.S. Department of Education

Moderator:
- **David Jones, Jr.** Chairman, Humana Inc.

11:30 - 11:45 A.M. **Break**

11:45 A.M. - 12:30 P.M. **Business Meeting**

12:30 - 2:00 P.M. **Lunch**
The Balcony Room
The Role of Science in American Diplomacy
Luncheon Speaker:
- **Nina V. Fedoroff,** Science and Technology Adviser, U.S. Department of State

AGENDA:
Friday, June 25, 2010 (cont.)

2:15 - 3:00 p.m.

Plenary Session II
Maintaining U.S. Competitiveness: Reauthorizing the COMPETES Act

- **The Honorable Steven E. Koonin**, Under Secretary for Science, U.S. Department of Energy

Moderator:

- **Mark Wrighton** Chancellor, Washington University in St. Louis

3:00 - 3:30 p.m.

Leadership Transition and Meeting Wrap-Up

5:30 p.m.

Closing Reception
The Salon

OVERVIEW

Welcome to the Business-Higher Education Forum's (BHEF) Summer 2010 Member Meeting. The meeting is designed to advance BHEF's action agenda and to focus on two of its elements: strengthening preschool through high school (P-12) education by restructuring the Elementary and Secondary Education Act; and, increasing federal investments in STEM research and development, and in STEM education at all levels. The meeting will enable BHEF members to engage in discussions with high-level representatives from the White House and key federal agencies regarding proposed changes to federal legislation, programs and funding priorities that will advance education reform and increase U.S. competitiveness, and discuss what role BHEF members can play in these processes.

During our opening dinner on Thursday, Council of Economic Advisors member Dr. Cecilia Rouse will discuss President Obama's priorities and how the current economic and fiscal conditions shape the strategies for confronting our educational and workforce challenges. In addition to her appointment by the president, Dr. Rouse is a noted Princeton economist and has conducted extensive research on education.

On Friday morning, BHEF member Charlie Reed, chancellor of the California State University System, will lead an opening discussion of progress toward state adoption of college-ready common core standards and the implications for reauthorization of the Elementary and Secondary Education Act. Dane Linn, director of the Education Division at the National Governors Association Center for Best Practices, and Molly Corbett Broad, president of the American Council on Education, will join the conversation.

Plenary Session I

The Obama Administration's Blueprint for "Fixing NCLB" in the Reauthorization of the Elementary and Secondary Education Act (ESEA)

Calling for a broad overhaul of the No Child Left Behind (NCLB) law (the Elementary and Secondary Education Act, or ESEA), the Obama administration sent a blueprint to Congress urging bipartisan support for a plan to reshape the federal role in education. President Obama's plan aims to strike a careful balance by retaining some of the key features of the current NCLB legislation, including its requirement for annual reading and math tests, while proposing other far-reaching changes. In particular, the President proposes that ESEA for the first time set a goal that by 2020, all students will graduate from high school ready to succeed in college and the workplace.

In this session, Deputy Secretary of Education Anthony Miller will address the administration's strategy for ESEA reauthorization, as well as the impact of the recent Race to the Top awards and the adoption by states of the common core standards. In addition, he will share with BHEF members suggested actions they can take to assure passage of an ESEA reauthorization bill that ensures that more students are prepared for college and the workforce.

Plenary Session II

Maintaining U.S. Economic Competitiveness: Reauthorizing the America COMPETES Act

In response to the National Academies report, Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future (2006), in 2007, Congress enacted with broad bipartisan support and President Bush signed into law "The America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act." The COMPETES Act sought to ensure not only that the nation would continue to be the world's leader in research and innovation, but that it would also produce the next generation of scientists and engineers capable of driving innovation.

The original COMPETES Act is set to expire at the end of FY10 and Congress currently is working to reauthorize it. The House, led by Rep. Bart Gordon (D-TN), passed its reauthorization bill, HR 5116, on May 28. The bill builds on the 2007 legislation by keeping NSF, DOE and NIST budgets on track for doubling by 2017, and increases levels of support for STEM education. In addition, the bill specifically seeks to increase the number of students who earn STEM degrees and choose STEM careers. It also contains a number of new provisions that would seek to transform STEM undergraduate and graduate education. The House reauthorization bill also encourages stronger collaborations between business/industry and higher education and, for the first time, would coordinate federal STEM education activities. The Senate now is expected to take up its own reauthorization bill, but the timetable for deliberations is unclear.

Other Matters of Note

On June 25, members will hold their annual business meeting, at which proposed amendments to BHEF's bylaws will be considered, along with the election of a new vice chairman and a new slate of candidates for BHEF's Executive Committee. The meeting also marks the transition of BHEF's senior leadership, as David Skorton's term as BHEF chairman ends and Bill Swanson succeeds him to the chairmanship.

PLENARY I

The Obama Administration's Blueprint for "Fixing NCLB" in the Reauthorization of the Elementary and Secondary Education Act (ESEA)

Overview

Calling for a broad overhaul of the No Child Left Behind (NCLB) law (the Elementary and Secondary Education Act, or ESEA), in March the Obama administration sent a blueprint to Congress urging bipartisan support for a plan to reshape the federal role in education and redress controversial NCLB provisions around teaching, assessments, standards, and curriculum. Currently, NCLB affects each of the nation's nearly 100,000 public schools, and President Obama's plan aims to strike a careful balance by retaining some of its key features, including its requirement for annual reading and math assessments, while proposing other far-reaching changes.

The blueprint is organized around three major goals for reauthorization:

- Support college- and career-ready standards and prepare college- and career-ready students.
- Reward academic excellence and growth at the school, district, and state levels.
- Increase local control and flexibility while maintaining the focus on equity and closing achievement gaps.

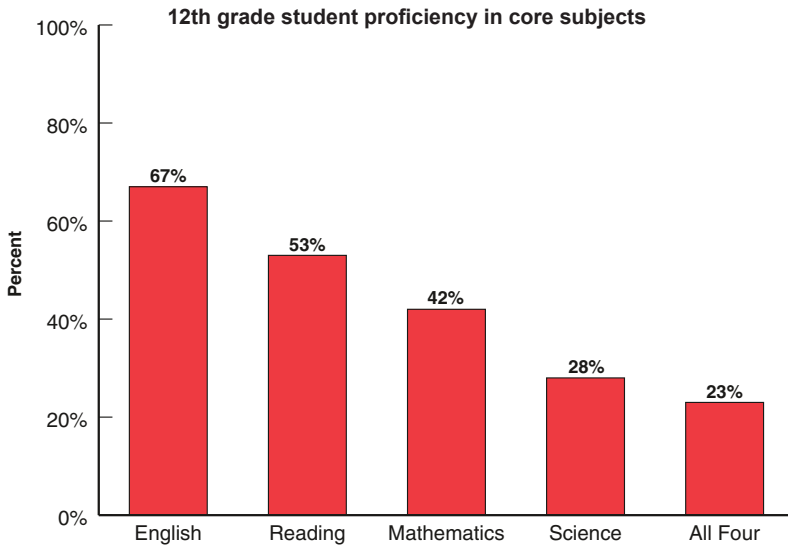
These goals have derived in part from a year of unprecedented federal investment in education through the Race to the Top and Investing in Innovation programs that are inspiring districts and states to tackle ambitious and unprecedented reform agendas. Race to the Top, in particular, is the largest single federal investment in school reform ever, and represents a radically different approach to education improvement. As the ESEA reauthorization unfolds, the tension around attempting innovative but often untried practices such as those supported by Race to the Top will be a primary focus.

During Plenary Session I, U.S. Deputy Secretary of Education Anthony Miller will discuss the administration's blueprint for the impending reauthorization of ESEA and Race to the Top's possible effect on proposed changes to the legislation.

Blueprint Background and Details

The Obama administration's overhaul of ESEA responds to national concerns around the country's competitiveness. Proposed changes would set a goal that, by 2020, all students will graduate high school ready to succeed in college and the workplace, in turn supporting the president's aim for America to once again lead the world in college completion rates. These policy changes align with BHEF's College Readiness, Access, and Success Initiative (CRI).

Achieving this goal will require the nation to address the alarmingly low levels of college and workforce readiness exhibited by high school graduates in core academic subjects on a very ambitious timeline. Currently, only 23 percent of high school students are proficient in the four core subjects of english, reading, math, and science.



Source: ACT (2009). *College Readiness Benchmarks*

While Race to the Top remains a critical example of how to spur the nation to improve education, the competition has faced many detractors, foreshadowing possible criticisms that may arise during ESEA reauthorization. Opposition to this reform has been focused on concerns that the recently announced common core standards are too low or that such involvement from the federal government represents too much involvement in local affairs. Critics also have argued that the encouraged reforms are unproven or have been unsuccessful in the past (see page 9).

Despite these criticisms, the ESEA reauthorization blueprint aims to build on the proposed reforms advocated as part of the American Recovery and Reinvestment Act (ARRA) and implemented through the Race to the Top competition. The blueprint's NCLB changes include:

Key Provision	NCLB	Proposed ESEA
Target Date	2014	2020
Goal	All students meet proficiency targets set by state	All students graduate high school college and work ready
Standards	States charged with setting own standards for math and reading	States must adopt common core standards in math and reading, or develop their own standards that meet college and career readiness benchmarks Allows states the flexibility to assess students in other subjects
Accountability Measures	Measured through 8th grade Accountability based on one-time snapshot of students' proficiency Pass/fail school grading system	Measures through high school Measures individual students' academic growth over time Bases school performance on additional indicators, including pupil attendance, graduation rates, and learning climate Rewards top performers and lessens federal intervention

Under the administration's blueprint, in order to be eligible to receive Title 1 funds, states will be required to align their standards for reading and mathematics with college and career-ready expectations, either by participating in the Common Core State Standards Initiative led by the National Governor's Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO) or by upgrading their existing standards. BHEF has signed on as a supporter of the Common Core State Standards Initiative.

The blueprint provides incentives to encourage states to adopt the common core standards. In addition to requiring annual assessments and accountability measures for student performance in reading and mathematics, the blueprint would allow states flexibility to test in other areas, including science, as BHEF and others have previously called for. It does not, however, explicitly require that states develop and adopt science standards.

Of particular interest to BHEF is the STEM portion of the blueprint. The blueprint proposes that states receiving grants develop comprehensive, evidence-based plans to provide high-quality STEM instruction. States may carry out strategies to improve STEM instruction statewide, such as partnering with statewide Race to the Top partnerships, supporting districts in identifying effective instructional materials, and improving teachers' knowledge and skills in effective STEM instruction for all students, including English Learners and students with disabilities.

During many of the grant competitions proposed in the blueprint, priority would be given to states that have adopted common, state-developed, college and work standards. Priority may also be given to states that use technology to address student learning challenges; cooperate with outside partners with STEM expertise; or propose to prepare more students, including students from underrepresented groups, for advanced study and careers in STEM.

Status of ESEA Legislation

Secretary of Education Duncan held bipartisan meetings with key congressional leaders in March to begin talks about the reauthorization. While the administration and congressional leaders indicated they would like to have legislation introduced before Congress recesses for the summer, the prospect appears to be growing dimmer given a packed legislative calendar and other emerging priorities. One scenario would be that reauthorization could slip back until after the fall elections.

Race to the Top

The American Recovery and Reinvestment Act (ARRA) of 2009 set aside approximately $5 billion to be used by the U.S. secretary of education to make incentive grants to states that "have made significant progress" in meeting four objectives: achieving equity in teacher distribution, improving collection and use of data, enhancing standards and assessment, and supporting struggling schools.

The Race to the Top competition was designed to implement the provisions of the ARRA and included several policy priorities that were heavily weighted in selecting winning states, such as articulating the state's reform agenda and securing buy-in from districts and teachers around this agenda, evaluating teachers and principals based on gains in student achievement, developing and adopting common state standards, turning around the lowest-achieving schools, and ensuring successful conditions for high-performing charters and other innovative schools. In addition, states emphasizing the preparation of students for careers in science, technology, engineering, and mathematics, or STEM, were given a competitive preference.

During the first round of competition, only two of the 41 states that applied were awarded grants—Delaware and Tennessee. Later analysis indicated that three factors seemed to have contributed to the winning applications:

1. **Linking teaching evaluation to student gains.** Both Delaware and Tennessee have strong existing data systems, which they have said they plan to use for teacher evaluations and for key recruitment, compensation, and tenure decisions. For example, Delaware will begin requiring strong evidence of student growth for teachers to be labeled "effective" and to receive tenure.
2. **Taking over failing schools.** Tennessee committed to intervening in failing schools through a state "Achievement School District" that groups the lowest performing schools.
3. **Buy-in from the districts and teachers around the state.** Both states had strong buy-in from almost all school districts and teachers unions.

The Round One competition revealed the high value placed on union and stakeholder support. While some experts believe several other states, including Florida, Georgia, and Louisiana, all had applications at least as strong, they lacked the nearly unanimous support from local unions and school districts obtained by Delaware and Tennessee.

Round Two applications were due June 1 and 35 states and the District of Columbia applied for a slice of the remaining $3.4 billion in funds. Nine states that applied earlier this year did not resubmit their applications. Though reasons vary by state, reports indicate that some did not receive enough support from teacher unions and others were wary of passing reform laws that link student achievement to teacher evaluations and require adoption of common academic standards across states.

PLENARY II

Maintaining U.S. Economic Competitiveness: Reauthorizing the America COMPETES Act

Overview

Seeking to strengthen U.S. leadership in the areas of science, technology, engineering, and mathematics (STEM), in late May the U.S. House of Representatives approved by a vote of 262-150 the reauthorization American COMPETES Act. The crucial legislation would authorize $85.6 billion in spending on STEM programs over five years. BHEF first supported the bill in 2007, when it was enacted by President Bush with strong bipartisan support.

The approved reauthorization bill, which now heads to the Senate for deliberation, maintains the planned doubling for the Department of Energy's (DOE) Office of Science, the National Science Foundation's (NSF), and the National Institute of Standards & Technology's (NIST) research budgets by 2017. Additionally, the bill will increase levels of support for STEM education by coordinating federal activities and improving education at all levels, including undergraduate and graduate education.

During Plenary Session II, DOE Under Secretary for Science Dr. Steven E. Koonin will discuss the hurdles facing the nation in remaining globally competitive and the opportunity that the reauthorization of the COMPETES Act presents to address these challenges.

COMPETES Background

The America COMPETES Act was enacted in 2007, largely in response to the report "Rising Above the Gathering Storm," which was commissioned by Congress and asserted the need for addition federal investments in basic research and in STEM education in order to counter threats to U.S. competitiveness. The bill was passed with strong bipartisan support in Congress and with overwhelming support of the business and scientific communities.

The law sought to ensure not only that the nation would continue to be the world's leader in research and innovation, but also that it would produce the next generation of scientists and engineers capable of driving innovation. The original bill included more than 100 sections that direct specific programs

and policies at seven federal offices and agencies, including the Office of Science and Technology Policy (OSTP), the National Aeronautics and Space Administration, NIST, the National Oceanic and Atmospheric Administration, DOE, the Department of Education, and NSF.

The 2007 COMPETES Act also sought to address concerns about lagging U.S. student performance in mathematics and science, STEM teaching and learning, and the nation's ability to replicate and scale promising practices. However, many of the provisions of the legislation failed to be funded, or were only recently funded with the passage of the American Recovery and Reinvestment Act (ARRA) in 2009.

COMPETES Reauthorization

HR 5116, the House reauthorization bill that was passed on May 28, builds upon the 2007 legislation by keeping research funding for NSF, DOE, and NIST on track for doubling by 2017 and by increasing levels of support for STEM education. In addition, it contains several new features that would seek to increase the numbers of students who earn STEM degrees and choose STEM careers, consistent with recommendations by BHEF and several of its members (see sidebar).

Indeed, for the first time, the House bill includes a number of provisions that would help transform STEM undergraduate and graduate education, and encourage stronger collaborations between business/industry and higher education. These provisions will encourage a systemic approach that bolsters postsecondary STEM education as well as K-12 education.

The reauthorization also contains language to expand the Robert Noyce Teacher Scholarship Program, and reduce its cost-sharing requirement so that a more diverse group of colleges could afford to participate. However, the bill does not extend funding for the Mathematics and Science Partnership (MSP) Program, which was part of the original America COMPETES Act and is run by NSF.

New measures in the bill would ensure better coordination of STEM education activities across federal agencies. The bill also requires the White House to create an advisory committee on STEM education responsible for soliciting input from a variety of stakeholder groups, including business and higher education, with the goal of offering guidance to the president on how to better align federal programs with the needs of states and school districts and increasing connectivity among public and private STEM education efforts.

BHEF Testifies in Favor of HR 5116

Earlier this year, BHEF member Rick Stephens, senior vice president, human resources and administration, The Boeing Company, testified before the House Science and Technology Committee on strengthening STEM undergraduate education.

BHEF members Jim Simons, founder and chairman of Renaissance Technologies and Math for America (MfA); Gordon Gee, president, The Ohio State University; and Jeffrey Wadsworth, president and CEO, Battelle Memorial Institute also testified in support of the bill's reauthorization, as well as for strong partnerships involving business, K-12, and higher education that would bolster current programs and efforts, and lead to even more successful ones.

Key STEM Postsecondary Education Provisions in HR 5116

Undergraduate Education

- Transforming Undergraduate Education in STEM
- Broadening Undergraduate Participation
- Research Experiences for Undergraduates
- STEM Industry Internships
- Tribal Colleges and Universities

Graduate Education

- Graduate Student Support
- Postdoctoral Research Fellowships
- 21st Century Graduate Education
- Postdoctoral Fellowship in STEM Education Research
- Broadening Participation in Training and Outreach

Another measure calls on NSF, NIST, and the Department of Education to collaborate in identifying "grand challenges" in STEM education research including those that use a systems approach and then deciding what role each federal agency should play in supporting and disseminating the research and its results.

Status of Legislation

The May 28 vote represented the third effort by Democrats, led by House Science and Technology Chairman Bart Gordon (D-Tennessee), to pass the reauthorization bill. A majority of Republicans, led by Ranking Committee Member Ralph Hall (R-Texas), opposed this bill on the basis of its estimated $86 billion price tag and tried, unsuccessfully, to shorten the reauthorization term and to cut some of the programs the bill authorized.

BHEF wrote to House Speaker Nancy Pelosi (D-California) and Republican Leader John Boehner (R-Ohio) urging swift action toward the House bill's reauthorization as key to ensuring America's economic future, joining a vast and diverse group of organizations, including the National Science Teachers Association, the American Chemical Society, the U.S. Chamber of Commerce, the Business Roundtable, more than 90 colleges and universities, and more than 650 companies across the country.

BHEF now will urge the Senate to develop and approve its version of the bill that is largely consistent with the House's; however, some analysts predict this to be a difficult task given the Senate's busy agenda and a highly partisan atmosphere in an election year.

Nina V. Fedoroff

Special Adviser, Science and Technology
U.S. Department of State

Dr. Nina V. Fedoroff was named by former U.S. Secretary of State Condoleezza Rice to be her new Science and Technology Adviser in August 2007. In September 2007, USAID Administrator Henrietta Fore invited Dr. Fedoroff to serve her in the same capacity. Dr. Fedoroff is the Willaman Professor of Life Sciences and Evan Pugh Professor in the Biology Department and the Huck Institutes of the Life Sciences, Pennsylvania State University. Dr. Fedoroff is a leading geneticist and molecular biologist who has contributed to the development of modern techniques used to study and modify plants.

Dr. Fedoroff did her undergraduate work at Syracuse University, graduating summa cum laude with a dual major in biology and chemistry, and she earned her Ph.D. at the Rockefeller University. Both her undergraduate research at Syracuse University and her graduate research on RNA bacteriophage at The Rockefeller University were supported by grants and fellowships from the National Science Foundation. Following graduation from The Rockefeller University, she joined the faculty at the University of California, Los Angeles (UCLA), and carried out research on nuclear RNA.

Dr. Fedoroff is a member of the National Academy of Sciences, the American Academy of Arts and Sciences, and the European Academy of Sciences. She has served on the National Science Board of the National Science Foundation. Dr. Fedoroff is a 2006 National Medal of Science laureate.

In 1978, she became a staff member at the Carnegie Institution of Washington and a faculty member in the Biology Department at Johns Hopkins University. In 1995, Dr. Fedoroff joined the faculty of the Pennsylvania State University, where she served as the founding director of the Huck Institutes of the Life Sciences.

Steven E. Koonin

Under Secretary of Science
U.S. Department of Energy

Dr. Steven E. Koonin was confirmed by the Senate on May 19, 2009, as the second undersecretary for science in the U.S. Department of Energy (DOE). Dr. Koonin brings to the post a distinguished career as a university professor and administrator at the California Institute of Technology. He also has experience in the private sector, joining the government from the position of chief scientist for BP, plc, based in London.

Dr. Koonin joined the Caltech faculty in 1975, was a research fellow at the Neils Bohr Institute during 1976 - 1977, and was an Alfred P. Sloan Foundation Fellow during 1977 - 1979. He became a full professor of theoretical physics at Caltech in 1981 and served as chairman of the faculty from 1989 - 1991. Dr. Koonin was the seventh provost of Caltech (from 1995 - 2004).

Dr. Koonin is a member and past chair of the JASON Study Group, advising the U.S. government on defense science and technology. Dr. Koonin has served on numerous advisory committees for the Department of Energy, the National Science Foundation, and the Department of Defense. He is a member of the Council on Foreign Relations and the Trilateral Commission and a fellow of the American Physical Society, the American Association for the Advancement of Science, and the American Academy of Arts and Sciences.

Dr. Koonin received his B.S. in Physics from Caltech in 1972, worked as a summer graduate student at Los Alamos from 1972-1975, and received his Ph.D. in Theoretical Physics from the Massachusetts Institute of Technology (MIT) in 1975. He received the Humboldt Senior U.S. Scientist Award in 1985 and the E. O. Lawrence Award from the Department of Energy in 1998.

Dane Linn

Director, Education Division
National Governors Association Center for Best Practices

Dane Linn is the director of the education division at the National Governors Association (NGA) Center for Best Practices and oversees all education-related policy research, analysis, and resource development.

Recognized as a national expert in his field, Linn has authored numerous policy reports on issues ranging from school finance to teacher quality and school redesign to pay for performance. Recently, under the leadership of former Governor Mark Warner of Virginia, Linn spearheaded the division's national initiative on Redesigning the American High School.

Prior to his work at NGA, Linn worked at the West Virginia Department of Education where he was responsible for ensuring the implementation of the Individuals with Disabilities Education Act. Before that, he served as legislative liaison to the House of Delegates. Linn's professional experience in education began as an elementary school principal and teacher.

A graduate of Cabrini College, Linn received a master's degree from Marshall University Graduate College and is currently a PhD candidate at Virginia Polytechnic Institute and State University.

Anthony W. Miller

Deputy Secretary of Education
U.S. Department of Education

Anthony Miller was nominated by President Barack Obama on May 18, 2009, to be deputy secretary of education, and he was confirmed by the Senate to hold that position on July 24, 2009. As deputy secretary, he serves as the chief operating officer of the Department.

Prior to joining the department, Miller was an operating partner with Silver Lake, a leading private investment firm with over $15 billion in capital, and an executive vice president of operations with LRN Corporation, a market-leading provider of governance and compliance software, and legal research services. Prior to LRN, he worked for 10 years at McKinsey & Company, where he was a partner specializing in growth strategies, operating performance improvement, and restructuring for companies throughout the United States, Europe, and Asia. Miller also worked for Delco Electronics, a subsidiary of GM Hughes Electronics, where he managed regional channel marketing.

In addition to his private-sector operating experience, Miller worked extensively with the Los Angeles Unified School District from 1997 to 2000, developing student achievement goals and strategies, aligning budgets and operating plans, and designing metrics and processes for monitoring districtwide performance. He undertook similar work with the Santa Monica-Malibu Unified School District in 2001. Through his service as an ex officio member of the Board of Education of the City of Los Angeles' Budget and Finance Committee in 2002 and 2003, Miller became particularly familiar with school district budget issues.

Miller holds an M.B.A. from Stanford's Graduate School of Business and a bachelor's degree in industrial engineering from Purdue University.

Cecilia Rouse

Member
Council of Economic Advisors

Dr. Cecilia Rouse is a member of President Obama's Council on Economic Advisors. She is on leave from Princeton University, where she is the Theodore A. Wells '29 Professor of Economics and Public Affairs. She has been a senior editor of *The Future of Children* and the *Journal of Labor Economics*.

Her research focuses on labor economics and the economics of education. Recent research includes studying Florida's school accountability and voucher programs, school technology programs in large urban districts, strategies for increasing educational attainment among community college students, and the impact of student loans on post-college occupational choices.

Other topics have included the study of the economic benefit of community college attendance, the Milwaukee Parent Choice Program, and the effects of education inputs on student achievement. She also has studied the existence of discrimination in symphony orchestras unions in South Africa, and the effect of financial aid on college matriculation.

Dr. Rouse is the founding director of the Princeton University Education Research Section, and has been the director of the Industrial Relations Section. She was a member of the MacArthur Foundation's Research Network on the Transition to Adulthood. Rouse served in the National Economic Council under President William J. Clinton from 1998 to 1999. She received her Ph.D. in economics from Harvard University.

Dennis Nally

Chairman
PricewaterhouseCoopers International Ltd.

Dennis M. Nally is chairman of PricewaterhouseCoopers International Ltd. The firms that comprise the PwC Network are all members of PricewaterhouseCoopers International Ltd.

Nally most recently served as chairman and senior partner of the U.S. Firm of PricewaterhouseCoopers having first been elected to those roles in 2002. Prior to that, from 2000 through 2001, he served as managing partner of the U.S. Firm; and from 1998 to 2000, he was audit and business advisory services leader for the U.S. Firm. In earlier years he worked in a variety of capacities for the firm. He also was a member of the General Council of the Worldwide Organization. Nally has extensive experience serving large multinational clients in a variety of industries, principally focusing on the technology market, including computers and life sciences.

He is a frequent speaker and guest lecturer on issues affecting the accounting profession and the U.S. capital markets. He has spoken at the World Business Forum, the Financial Executives International, the Detroit Economic Club, the Cambridge Energy Research Association (CERA) annual global energy conference, New York University's Stern School of Business, Ohio State University, Duke University's Fuqua School of Business/Coach K Leadership Conference, Wake Forest University's Hylton Lecture Series, and the Leighton Lecture Series at the University of Illinois.

Nally is a member of the American Institute of Certified Public Accountants and the New York State Society of CPAs. He is a member of Duke University's Fuqua School of Business Board of Visitors, The Carnegie Hall Society Board of Trustees, The Business Roundtable, and the Diocese of Bridgeport, CT Finance Committee.

A graduate of Western Michigan University, Mr. Nally also completed the Columbia University and Penn State University Executive Programs.

Sean O'Keefe

Chief Executive Officer
EADS North America

Sean O'Keefe assumed the responsibilities as EADS North America's chief executive officer on November 1, 2009, and was elected to the company's board of directors effective the same day. His duties include directing EADS activities in the United States, developing strategic partnerships with U.S. companies, and enhancing the participation of EADS in the U.S. marketplace — including the development, growth, and management of large-scale defense acquisition programs.

Globally, EADS is the parent company of some of the most recognized brands in the international aerospace and defense sector including Airbus, Eurocopter, Ariane Space, Astrium, Eurofighter, and MBDA. The company had annual revenues in 2008 of more than $63 billion and employs some 118,000 people worldwide.

Prior to joining EADS North America, O'Keefe served as a corporate officer of the General Electric Company in the Technology Infrastructure sector, leading the Washington operations of the GE Aviation business. From 2005 to 2008, he served as Chancellor of the Louisiana State University, the chief executive officer, in Baton Rouge, Louisiana.

On four separate occasions O'Keefe served as a presidential appointee. Prior to leading LSU, he served as the 10th administrator of the National Aeronautics and Space Administration. O'Keefe joined President George W. Bush's administration on inauguration day as deputy assistant to the President and deputy director of the Office of Management and Budget until December 2001, when he was appointed NASA Administrator.

O'Keefe earned his Bachelor of Arts from Loyola University in New Orleans in 1977 and his Master of Public Administration from the Maxwell School of Syracuse University in 1978.

Jack Wilson

President
University of Massachusetts

Jack M. Wilson is the 25th president of the five-campus, 60,000-student University of Massachusetts System. He has served as president since September 2, 2003. During his career, he has served various institutions as professor of physics, department chair, research center director, dean, vice president, provost, and a private sector entrepreneur. At the University of Massachusetts, he served previously as the vice president for Academic Affairs and as founding CEO of UMassOnline.

Prior to arriving at UMass, Wilson was the J. Erik Jonsson '22 Distinguished Professor of Physics, Engineering Science, Information Technology, and Management at Rensselaer Polytechnic Institute, where he also had served as a dean, research center director, and provost. Before being appointed at Rensselaer, he served at the University of Maryland, College Park and as an officer of the American Association of Physics Teachers, the American Institute of Physics, and the American Physical Society. As the CEO of UMassOnline, he helped to build the system-wide initiative into one of the largest externally directed online programs in the United States.

Wilson is nationally and internationally known for his leadership in the reform of higher education programs, winning the Theodore Hesburgh Award, the Boeing Award, and the Pew Charitable Trust Prize for his innovative programs. He was awarded an Outstanding Civilian Service Medal by the U.S. Army for service to the Army Education program.

He is a Fellow of the American Physical Society, and has served as a national officer of the Physical Society, American Institute of Physics, and the American Association of Physics Teachers. He has also served as a member or chair of several National Academy of Science and National Research Council study committees and task forces.

Larry Zimpleman

Chairman, President & Chief Executive Officer
Principal Financial Group

Larry D. Zimpleman is chairman, president, and chief executive officer of the Principal Financial Group®. He is responsible for overall management of the company.

Zimpleman joined the company in 1971 as an actuarial intern. From 1976 to 1997 he served in various management and leadership positions at the officer level in the pension department. He was named vice president in 1997, senior vice president in 1999, executive vice president in 2001, president of Retirement and Investor Services in 2003, and president and chief operating officer in 2006. He was named to his current role in 2008 and elected chairman of the board in 2009.

Zimpleman currently serves as a member of the Board of Trustees for Drake University. He also serves on the Financial Services Roundtable Board & Executive Committee, on the board of the American Council of Life Insurers (ACLI), and additionally serves as chair of the ACLI Retirement & Financial Security Steering Committee.

He is a Fellow of the Society of Actuaries and an Enrolled Actuary. Additionally, he is a member of the American Academy of Actuaries, Des Moines Actuaries' Club, Iowa Business Council, and the Business Roundtable.