

Hearing on *Rising Above the Gathering Storm Revisited Report*
Report courtesy of Lewis-Burke Associates 10/13/10

On September 29, the House Committee on Science and Technology held a hearing on the recently released report, *Rising Above the Gathering Storm, Revisited: Rapidly Approaching Category 5*. This report is a follow-up to the *Rising Above the Gathering Storm* report published in 2005. The House Committee heard testimony from members of the committee that drafted the report, including Chair, Norman Augustine, retired CEO of Lockheed Martin; Craig Barrett, retired CEO of Intel; Chad Holliday, retired CEO of DuPont; and Dan Mote, President Emeritus of the University of Maryland. The report, requested by the Presidents of the National Academy of Sciences, National Academy of Engineering, and Institute of Medicine, states that the nation's competitive position has deteriorated in the past five years, and America needs sustained investment in education and basic research to keep from slipping further.

The 2005 *Rising Above the Gathering Storm* report—drafted by a committee of 20 CEO's, former government officials, university presidents, and scientists, and also chaired by Norman Augustine—was requested by a bipartisan group of Senators and Representatives who asked the Academies to consider the following, “What are the top 10 actions, in priority order, that federal policymakers could take to enhance the science and technology enterprise so that the United States can successfully compete, prosper, and be secure in the global community of the 21st century? What strategy, with several concrete steps, could be used to implement each of those actions?” The original report was published at a time when there was increased media attention on America's ability to compete in a global economy as well as concern about federal investment in research and development and America's STEM (science, technology, engineering, and mathematics) workforce. Ultimately, the *Gathering Storm* report's recommendations—including doubling the funding for the National Science Foundation, National Institute of Standards and Technology, and the Department of Energy's Office of Science, and creating the Advanced Research Projects Agency –Energy—were the foundation for the 2007 America COMPETES Act, which passed with wide bipartisan support.

In *Revisited* and at the hearing, report committee members noted that some progress has been made since 2005 in part due to the passage of the COMPETES Act and the American Recovery and Reinvestment Act, but suggests that in order to sustain progress, “it will be necessary to (1) reauthorize the America COMPETES Act, and (2) “institutionalize” funding and oversight of *The Gathering Storm* recommendations—or others that accomplish the same purpose—such that funding and policy changes will routinely be considered in future years' legislative processes.” In addition to this, the 2005 report primarily focused on and recommended the doubling of funding for the physical sciences (as funding for health sciences had doubled over the previous five years), but importantly the *Revisited* report observes that recommendations from the 2005 report now apply to the biological sciences—especially as innovation is becoming increasingly interdisciplinary.

Much of the discussion at the hearing focused on factors affecting American innovation,

especially improving STEM education, reforming visa policies to retain foreign students in the US workforce, and reforming the tax code to encourage research and reduce outsourcing. The report finds that three “ingredients” are essential to enhancing America’s position through innovation:

- Knowledge Capital: investing in fundamental research.
- Human Capital: investing in/assessing workforce education; science, engineering, and mathematics education; production of scientists and engineers; K-12 education; and importing talent.
- Environment (or innovation ecosystem): assessing what is needed to be first to market— cost of labor; tort policy; tax policy; regulatory barriers; cost/availability of capital; protection of intellectual capital; freedom from corruption; sanctity of law; cost of benefits; export control laws; visa policy; availability of markets; employment policy; stability and predictability of government, markets, etc.; availability of transportation and telecommunications; and market growth potential.

Many House Committee Members and witnesses used the hearing to argue for the importance and passage of the America COMPETES Reauthorization Act. The COMPETES Reauthorization Act passed the House on May 28; however, companion legislation is still under consideration in the Senate. The original America COMPETES Act expired on September 30.

The full *Revisited* report is available at http://www.nap.edu/catalog.php?record_id=12999.

Witness statements and a webcast of the hearing are available at http://science.house.gov/publications/hearings_markups_details.aspx?NewsID=2919.