

GLOBAL STRATEGY INSTITUTE 2008 ANNUAL CONFERENCE SUMMARY

Future Bound: The United States in a World of Change

On April 17, 2008, the CSIS Global Strategy Institute (GSI) hosted a major conference to celebrate its fourth anniversary and renew its mandate to address long-term challenges. This year we explored the changing international landscape within which the United States will navigate in the future along the theme “Future Bound”—as we are both bound for the future and by it. The conference sought to highlight areas critical to U.S. engagement - level of competitiveness, workforce trends, cyber security, state of physical infrastructure, higher education, promotion of innovation, investment in science and technology, and the role of government. The event featured keynote speakers and panelists—from academia to private corporations and from NGOs to the U.S. military—to explore these long-range challenges facing the United States.

A summary of these discussions is offered below. For more complete information, including audio recordings of presentations, please visit our Web site at <http://www.csis.org/gsi/>.

CSIS-GSI Strategic Vision Award

This year’s Strategic Vision Award honored David Walker, President and Chief Executive Officer (CEO) of the Peter G. Peterson Foundation and former Comptroller General of the United States. Mr. Walker opened his remarks by underscoring the vision of limited government espoused by our founding fathers, and argued that our federal government has strayed from this vision. He warned of serious budgetary problems in the near future as U.S. government spending continues to increase. (For example, entitlement spending will increase dramatically as Baby Boomers retire.) To deal with these problems, Mr. Walker called for a bipartisan task force to focus on four key issues: budget control, comprehensive Social Security reform, tax reform, and comprehensive health care reform.



Furthermore, he outlined four major deficits that threaten our progress in the years ahead: a budget deficit, savings deficit, balance of payments deficit, and a leadership deficit. Of course, the leadership deficit must be remedied to address the other challenges, and Mr. Walker pointed to four key attributes that we need our leaders to embody: courage to tell the truth; integrity to lead by example; creativity to learn from the past and formulate new ways of solving old problems; and stewardship, leaving situations and organizations better positioned for the future. Mr. Walker proclaimed that

Washington was badly broken and that change must come from outside the Beltway and on multiple fronts. Moreover, he stressed that these efforts must focus on long-term and sustainable solutions in order to ensure the nation’s future success.

The Future of America's Infrastructure

The first panel of the day featured Major General Don Riley, Deputy Chief of Engineers and Deputy Commanding General, U.S. Army Corps of Engineers; Jeff Gaynor, Advocate for Resilience Imperative; and moderator Jay Farrar, Senior Vice President for Government Affairs at CH2M HILL. General Riley discussed the recent American Society of Civil Engineers (ASCE)



study, which gave U.S. infrastructure a 'D' grade and put the cost of repairs and upgrades at \$1.6 trillion. Since the U.S. infrastructure budget is unlikely to increase dramatically, infrastructure engineering must anticipate future challenges and promote adaptation. General Riley emphasized the need for a systems-level approach to infrastructure appropriations, as opposed to the current project-by-project model. He stated that addressing infrastructure challenges at the systemic level will help us

avoid myopia and will foster efforts to achieve long-term solutions. He also called for sharing of responsibilities with communities as he illustrated a risk education campaign that informs citizens when they consider risks associated with living in particular neighborhoods and localities. For example, the Army Corps (along with FEMA, insurance agencies, and other partners) has published flooding 'risk maps' for the New Orleans area.

In his presentation, Jeff Gaynor drew upon his experiences working on the Homeland Security Advisory Council and serving as the Director of the Year 2000 (Y2K) Operations. In large part, he agreed with General Riley, focusing on the need for a risk-focused approach and an emphasis on infrastructure resiliency. According to Gaynor, Americans expect and deserve protection, but protection can never be guaranteed. A risk management approach allows decision-makers to alleviate risk where it is highest. An approach that aims for complete security is fundamentally flawed, because as Gaynor put it, "When everything is critical nothing is critical." He also argued for a locally-based approach that recognizes and draws upon the superior knowledge and understanding that citizens have for their own localities.

Keynote Speech: Thomas Hunter, Sandia National Laboratories

Dr. Thomas Hunter, President of Sandia Corporation and Director of Sandia National Laboratories, discussed America's nuclear security and cyber security. He praised efforts by the U.S. and others to reduce stockpiles of nuclear weapons, but also highlighted the security risks involved. As these stockpiles are reduced, there is a greater chance that some separated nuclear material could fall into the wrong hands. Such a situation would pose a grave security threat to many countries, so the international community must come together to address this problem.

Dr. Hunter then moved to the state of U.S. cyber security, highlighting the major threats to our cyber confidence. The threat of cyber warfare covers the full spectrum, from individual actors to nation-states, yet we are still unsure as to



the size and extent of this threat. However, we do know that cyber warfare is an advantageous form of assault for our adversaries, as it is extremely difficult for us to pinpoint who is behind these attacks. Dr. Hunter also highlighted another challenge in this area—our increasing reliance on electronics that are manufactured overseas. He sees this trend as a significant weakness, and asserted that we should expect it to be exploited by enemies of the U.S. We should not look to science alone to remedy these problems in cyber security; instead, effective solutions will require science, public awareness, and public policy.

Nonetheless, in a broader sense, science can allow us to develop a predictable understanding of systems, help us to build resiliency into complicated systems, enhance the trustworthiness of systems, and facilitate experimentation. Unfortunately, as Dr. Hunter notes, science is not a priority on our national agenda. The U.S. ranks 17th among developed countries for the share of college students receiving degrees in science and engineering, and we spend more on tort litigation (about \$3 billion) than on science research and development (R&D).

To meet these challenges, Dr. Hunter emphasized that reforming our education system is key. Currently, U.S. students rank toward the bottom for math and science test scores when compared with other industrialized nations. In addition, today we produce only 22 percent of the world's PhDs in science and engineering, down from 52 percent of the global share two decades ago. Consequently, in order to compete globally, Dr. Hunter asserted that we need to boost the *quality* of our education system, not simply the numbers of students that we educate.

The Future of American Higher Education

The second panel featured Terrell Halaska, Partner, HCM Strategists, LLC; Anthony “Bud” Rock, Vice President for Global Engagement, Arizona State University; and moderator George Mehaffy, Vice President for Academic Leadership and Change, American Association of State Colleges and Universities (AASCU). Ms. Halaska focused on key challenges facing American higher education.



Despite the fact that we spend more money on higher education per capita than any other country, we are behind nine other nations in the proportion of degrees conferred. In the U.S. today, only 40 percent of adults aged 25 to 34 have an associate degree or higher, a figure that has remained stagnant for decades. Meanwhile, many other countries in the world have surpassed the U.S. and reached the 55 percent mark in this category. Moreover, by the year 2012 the U.S. will have 3 million more jobs requiring a bachelor's degree, yet we will not have enough graduates to fill them. Ms. Halaska also touched on the ethnic disparities in education, arguing that the financial barriers to higher education must be reduced, high school recruitment and college preparation in low-income schools should be strengthened, and information on financial assistance must be more widely available to parents and young people.

Anthony “Bud” Rock outlined similar challenges for the U.S. higher education system, with a particular focus on global engagement. He explained that the key issues in higher education are student access, cost and affordability, and university and state/local government accountability. Higher education institutions, like businesses, have become risk-averse and self-serving, and society should demand more concrete results. According to Mr. Rock, universities should adapt to

our changing world by implementing the following strategies: (1) address the challenges of communities in which universities are located; (2) work toward deeper social transformation; (3) foster knowledge entrepreneurship and a culture of academic enterprise; (4) encourage research with practical applications; (5) promote intellectual and cultural diversity; (6) focus on the trans-disciplinary nature of research; and (7) conduct affairs with a global perspective.

To succeed in creating a highly-skilled and successful workforce, Mr. Rock stressed the importance of academic global proficiency. Such proficiency requires students to develop a basic global knowledge, have a sense of international comparison (understanding how disciplines vary from country to country), and experience real world learning (for which study abroad and international exchanges are critical tools).



Class of 2025

Erik Peterson, Senior Vice President at CSIS and Director of GSI, presented findings from the Institute's latest initiative, *Class of 2025*. The presentation explores the world that we are creating for the children being born this year, who will graduate from high school in the year 2025. Mr. Peterson framed the presentation by asking:

What message will those children have for us when they reach the [graduation] podium? Will they ask "What was it that gave you the foresight to create the circumstances of stability and security, sustainability on which we can now build our own lives, raise our own families?" Or the will ask, "To what extent, why didn't you identify the key obstacles (many of which have been raised here today)? Why couldn't you have done more to create circumstances of stability, security, and sustainability for our road ahead?"

To gain firsthand perspective from today's youth, Mr. Peterson showed video clips of short interviews he conducted with students from Southeast Missouri State University, most of whom expressed optimism about the future. Nonetheless, Peterson emphasized that if we fail to remedy



key symptoms of decline, we run the risk of squandering the achievements of previous generations. Examples of this erosion include our climbing stock of debt, our falling export levels relative to other industrialized countries, the displacement of the dollar by the Euro, our broken healthcare system, and our lack of energy security.

Mr. Peterson went on to highlight six dimensions of the world that the Class of 2025 will have to grapple with in the years ahead: (1) the growing U.S. population; (2) our lagging education system; (3) the ever-changing global economy; (4) our crumbling infrastructure; (5) the threats to our environment and our unsustainable consumption patterns; and (6) the void of effective leadership. As Mr. Peterson put it, facing down these challenges will require fundamental shifts in our thinking, significant reforms in our institutions, and an escape from the confines of "short-termism." As we go forward, Mr. Peterson envisions three possible trajectories for our country: (1) more of the same, in which we squander

our hyper-power; (2) limited triage, in which we employ simple stop-gap measures for our mounting economic, fiscal, and other difficulties; or (3) a broader, more unified approach built on the foundations laid out in the Class of 2025 initiative. Whichever path we may follow, Mr. Peterson made clear that our current course is wholly unsustainable and we all have a stake in these issues going forward.

America's Role in the World

The final panel of the conference featured Chad Evans, Vice President of Strategic Initiatives, The Council on Competitiveness; Robert Boege, Executive Director, The Alliance for Science & Technology Research in America (ASTRA); and moderator Linda Jamison, Dean and Senior Fellow, CSIS Abshire-Inamori Leadership Academy. Mr. Evans started off by discussing the U.S. role in the global economy, pointing out that our country has achieved the most robust GNP growth in the industrialized world over the last 20 years. However, Mr. Evans underscored several trends that are challenging American preeminence in the global economy. Namely, by 2020, China is expected to account for 20 percent of global economic growth, and many other emerging markets are on the move as well—due largely to rapidly growing GDP, rising exports, and their ability to attract foreign direct investment (FDI). A key component of these emerging markets is demographics: by 2020, 80 percent of the world's middle class consumers will be located outside of the industrialized world.



Therefore, Mr. Evans enumerated several key drivers that will shape future U.S. competitiveness: innovation and investment in R&D, in which the U.S. leads (yet other countries are gaining); entrepreneurship, in which the U.S. outpaces the rest of the world, especially for high-expectation entrepreneurship; and energy demand, which is at all-time highs in the U.S. and globally. To close, Mr. Evans discussed a new report to be released by the Council called “Thrive”, which investigates how we can meet the growing demand for middle-skill jobs in the U.S. and how we can build service sector skills in our workforce.

Mr. Boege continued this discussion by focusing on science and engineering funding and education. He emphasized that inadequate levels of federal research monies are directed toward science and engineering (S&E). Furthermore, he questioned whether policymakers truly understand the implications for U.S. competitiveness when we import 60 percent of our S&E graduate students from overseas, most of whom return to their countries of origin after completing their degrees. This trend certainly demonstrates that the U.S. is in serious competition with the rest of the world. Thus, ASTRA sought to create a nonpartisan framework to address the following issues: greater U.S. R&D investment; a focus on leading edge technologies; stronger support of the services sector; and promotion of interdisciplinary fields. Mr. Boege urged members of the audience to learn more about this initiative in ASTRA's recent publication, *Riding the Rising Tide: A 21st Century Strategy for U.S. Competitiveness and Prosperity*, available online at <http://www.aboutastra.org/pdf/ASTRARisingTide121107.pdf>.

For further information related to this conference and the Global Strategy Institute more generally, please visit us online at www.csis.org/gsi.