Tennessee Stakeholders Tackle Offshoring of STEM Workforce: White House Meets Tennessee’s Industry & Education Leaders

Knoxville, Tennessee (April 22, 2011) – Industry needs for Science, Technology, Engineering, and Mathematics (STEM) talent were the focus of the STEMdiversity “Roundtable” held at the Howard Baker Center for Public Policy April 21st, 2011. Some 70 national, regional and local leaders involved in resolving STEM education and workforce issues participated. Representatives included large and small businesses; educators from primary, secondary and college levels; state and local government; and nonprofit STEM-related organizations. The participants gathered (in literally- round table format of six individuals per table) to express their viewpoints on the key problems contributing to the well-recognized and widely reported decline in U.S. STEM talent in comparison to global competition.

The roundtable was organized by STEMdiversity, a public/private initiative focused on solutions to STEM issues (in particular issues of STEM workforce), with support from Facilitator Roger Conner, a consultant to Vanderbilt University, Larry Bridgesmith, Institute for Conflict Management and mediators from the Community Mediation Center, Knoxville, Jackie Kittrell, Executive Director. “The primary purpose of this roundtable,” said Stan Duncan, STEMdiversity Program Manager, “is to begin the dialogue among representatives of the diverse body of Knoxville-area and Tennessee stakeholders committed to resolving STEM problems; a dialogue that leads to a better understanding of the needs and perspectives of other stakeholders.” The organization plans to coordinate similar roundtable discussions around the state and through this series generate and present to the state a comprehensive and inclusive statement of a strategy for enhancing and coordinating the various state programs that address the viewpoints of all stakeholders.

The meeting started with “interview-style” conversations between the facilitator and four invited presenters, beginning with Dr. Patricia Falcone, a Senior Policy Analyst in the Office of Science and Technology Policy within the Executive Office of The President. Dr. Falcone, who was the first female engineering graduate from Princeton University, was interviewed live from Washington, DC. She gave a brief overview of the Obama administration’s STEM initiatives and the strong White House support for STEM and education in general. She emphasized that the decline in STEM talent is a threat to the economic health of the country, and even more importantly, is a significant national security issue. Dr. Falcone was followed by Becky Ashe, the Principal of the Knoxville STEM Academy and STEM Coordinator, Knox County School System, who said, “I really think one of the things we can do to increase the quality of life here in our community, and our region, is to have the next generation of workers and voters be people who —not that they put the value of science above all other things — understand how to think critically and how to examine issues from all perspectives, before making up their own minds.” Cavanaugh Mims, President of Visionary Solutions, provided the perspective of a government contractor (transportation of hazardous and radioactive materials) and highly successful minority business owner who said his opportunities were “created” by the very systems of education, government, and business that were the focus of the discussion. He reminded the audience that, “All of us are created by these social systems” that influence and emphasized “the educational system as one of the critical forces shaping our lives.” Brian Fitzgerald, Executive Director of the Business-Higher Education Forum (BHEF) an organization formed by CEOs of major U.S. corporations to address the needs of workforce for STEM talent said BHEF sees a “misalignment” between the knowledge and skills required of the growth jobs of 21st century industry and the college readiness of most high students, and a similar misalignment between what is taught and learned in college and the skills that are in high demand in modern industry. Dr. Fitzgerald quoted a number of stark statistics to support this position. He also spoke to the need for much more effective measures and emphasized the need for business leaders to work with education leaders to set clear goals and to identify and use the strategies and tools that have been shown to have success in other regional community efforts.

Reactions of participants to the four opening interviews and the roundtable discussions that followed were exceptionally positive. Dana Saywell of the Institute for Broadening Participation, a non-profit working nationally
to make STEM education and careers more accessible to underrepresented groups, stated “the roundtable was engaging, dynamic.” This is a “much needed discussion about how educators, industry and government can work together to address the STEM education and workforce development gap in Tennessee.”

According to Dr. Falcone, “Science and technology have long been at the core of American economic vitality and national security, and STEM education is key to cultivating the next generation of individuals who will expand upon those important achievements. Achieving our goal of bolstering STEM education will require an all-hands-on-deck approach that includes both governmental and non-governmental investments and creative public-private partnerships like this one.”