

Preliminary Agendas*

Workshop #1: The Skilled Technical Workforce (STW) and Why It Matters

Friday, August 7 | 1:00 pm – 2:30 pm (Eastern)

1:00 pm	Welcome	Emilda Rivers
1:05 pm	STW Initiative Overview	John Finamore
1:15 pm	Keynote: The Skilled Technical Workforce: Crafting America's	Victor McCrary
	Science and Engineering Enterprise	
1:40 pm	Skilled Technical Workers: Who They Are and Their Role in the	Amy Burke
	U.S. STEM Workforce	
2:25 pm	Wrap Up	John Finamore

Workshop #2: Administrative and Other Supplemental Data Sources for the STW

Friday, August 21 | 1:00 pm – 2:30 pm (Eastern)

1:00 pm	Welcome and STW Initiative Overview	John Finamore
1:10 pm	Keynote: Evidence-Based Policymaking Act and the STW	Emilda Rivers
1:30 pm	Developing an STW Administrative Data Strategy for a Federal	Matt Williams
	Statistical Agency	
2:05 pm	State Administrative Data: Lessons from Iowa	Vladimir Bassis
2:25 pm	Wrap Up	John Finamore

Workshop #3: Surveying the STW to Answer Policy-Relevant STEM-Workforce Questions: The 2021 National, Training, Education, and Workforce Survey (NTEWS)

Friday, August 28 | 1:00 pm – 2:30 pm (Eastern)

1:00 pm	Welcome and STW Initiative Overview	John Finamore
1:15 pm	Keynote: The Need for Accurate, Targeted, and Policy-Relevant	Nicole Smith
	Data on Individuals without a Bachelor's Degree	
1:40 pm	Measuring the STW and Credentials through the NTEWS	Gigi Jones
2:25 pm	Wrap Up	John Finamore

^{*} Workshop times are estimates and titles of presentations are subject to change.



Workshop Presenters

Vladimir Bassis serves as a Lead Education Program Consultant for Community College Management Information System (CC MIS) within the Iowa Department of Education. In this role, he works with community college data specialists, institutional researchers, and relevant subject matters specialists to ensure that all data exchange, archiving, maintenance, and further data processing projects are conducted in a timely and ergonomic manner. Bassis leads several CC MIS-related research designs and research implementations, resulting in products reflecting a variety of community college-based educational and organizational processes. Such products include federally or locally mandated accountability reports (such as Perkins Act, Condition of Community Colleges, etc.); program quality improvement efforts; educational statistics; information for legislators; requests for research data, and other reports and data compilations. He has been at the State of Iowa in the Department of Human Services and the Department of Education for the past 14 years.

Amy Burke has authored the labor force section of the congressionally-mandated *Science and Engineering Indicators Report* since 2016 and presented data on the skilled technical workforce as part of the 2018 report. As a member of the NCSES STW Working Group, Burke led the development of the NCSES's definition of the skilled technical workforce (STW) and its new data model that includes the STW as a part of the US STEM workforce.

John Finamore is the Director of NCSES's Human Resources Statistics Program. In this role, he oversees the NCSES surveys that collect education and workforce data related to the science and engineering enterprise. Over the past four years, Finamore has championed NCSES's efforts to establish the Skilled Technical Workforce Initiative and develop the National Training, Education, and Workforce Survey.

Gigi Jones chairs the NCSES STW Working Group's work on the <u>STW Initiative</u>, which involves the coordination of multiple activities—research, stakeholder engagement, and survey development. Also, she serves as the project officer, leading the daily operations of the forthcoming National Training, Education, and Workforce Survey (NTEWS), which NCSES plans to field in the summer of 2021.

Victor R. McCrary is the Vice President for Research and Graduate Programs at the University of the District of Columbia. Prior to this position, he was Vice Chancellor for Research at the University of Tennessee, Knoxville and before that the first Vice President for Research and Economic Development at Morgan State University, Baltimore, MD. He is a change agent and serial innovator responsible for developing a comprehensive research strategy, fostering cross-disciplinary research, expanding research programs via engagement with federal and state agencies (\$32M in FY16), increasing the University's intellectual property portfolio, and positioning Morgan State as Maryland's Public, Urban Research University. Previously, he was the Business Area Executive for Science & Technology at The Johns Hopkins University Applied Physics Laboratory (APL), where he directed investments totaling over \$60M for basic and applied research projects targeted for national security and space applications. In 2005, Dr. McCrary was selected to the rank of Principal Professional Staff at The Johns Hopkins University Applied Physics Laboratory. He is a former national president of the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), and a Fellow of the American Chemical Society.

McCrary led the National Science Board (NSB) Skilled Technical Workforce task force, which resulted in the NSB's 2019 report on the STW identified the opportunities and challenges facing students, incumbent workers, businesses, educators, and others involved in the STW. He has authored or co- authored over 60 technical papers and co-edited two books in his career at AT&T Bell Laboratories and the National Institute



of Standards and Technology (NIST). He is blessed to have received a number of honors and awards during his career including: Most Promising Black Engineer in 1990; co-recipient of the US Department of Commerce's Gold Medal in 2000; the 2002 NOBCChE Percy Julian Award; in 2005, he was featured in Science Spectrum Magazine as one of the Top 50 Minorities in Science, and elected to the 2007 DVD Association's Hall of Fame. In 2011, he was honored as Scientist of the Year by the Annual Black Engineer of the Year Award-STEM Conference. In 2015 he received the Alumni Award for Research Excellence from The Catholic University of America, and Distinguished Alumni Award by Howard University in 2017.

McCrary was appointed by President Barack Obama to the National Science Board, which oversees the National Science Foundation, in October 2016.

Emilda B. Rivers is the director of the National Center for Science and Engineering Statistics (NCSES), the principal statistical agency housed as a division within the National Science Foundation's Social, Behavioral, and Economic Directorate. NCSES serves as a clearinghouse for information about the US science and engineering enterprise, often in a global context.

Prior to her appointment as NCSES director, Rivers was the NCSES deputy director. She previously led the center's largest program area, the Human Resources Statistics Program. She has also worked for the US Census Bureau and US Energy Information Administration.

In 2017, Rivers was named by Forbes as one of 25 Women Leading Data and Analytics in the US Government. She graduated top of her class in mathematics from South Carolina State University and has a Master of Science degree from the University of Maryland, College Park.

Nicole Smith is a Research Professor and Chief Economist at the Georgetown University Center on Education and the Workforce, where she leads the Center's econometric and methodological work. One of her primary functions at the Center is developing a framework for restructuring long-term occupational and educational projections. This framework forms the underlying methodology for Help Wanted, Recovery and The Future of Work, three reports in an ongoing series that projects education demand for occupations in the US economy.

Matt Williams is a Mathematical Statistician with the National Center for Science and Engineering Statistics at the National Science Foundation. He works in the Statistics and Methods Program to support methodological research and quality at NCSES. Williams served on the NCSES STW working group as the task lead on Administrative and Supplemental Data. In addition to interests in combining survey and alternative data sources, his current research includes Bayesian models, survey sampling methods, and disclosure protection methods.

