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## **Praise for *Securing America's Future:* *A Framework for Critical Technology Assessment***

“If the US is to win the global race for innovation advantage, smart technology policy will be needed. And that depends on in-depth technology analysis. That is why the new analysis from the National Network of Critical Technology Assessment is so important.”

—Rob Atkinson, President, Information Technology Innovation Foundation (ITIF)

“Solutions to many of the challenges confronting our nation—from the environment to health care, from national security to the economy—require technology advances. Herein is a pathway to such advances.”

—Norman Augustine, Former Chair and CEO, Lockheed Martin; Former Under Secretary of the Army

“The US is embedded in an international economy, facing massive trade deficits in manufactured and advanced technology goods. Yet we have been flying blind, failing to track our competitors and where they and we stand on emerging technologies. This report provides the roadmap on how we must act to turn that problem around. It’s important to both national and economic security that we adopt it.”

—William Bonvillian, Fellow, American Association for the Advancement of Science (AAAS); Lecturer, Massachusetts Institute of Technology (MIT)

“Well-targeted technology investments have enormous potential, reaching from innovation to social well-being to national security. I am thrilled to see the novel ideas in Erica Fuchs’s Hamilton Project proposal take the next step toward becoming a national capability through this year’s National Network for Critical Technology Assessment. This sort of artful and strategic collaboration is necessary to confront obstacles and seize opportunities ahead.”

—Wendy Edelberg, Director, The Hamilton Project, Brookings Institution

“This is an impressive set of analyses on topics of key national importance, especially given the short time frame under which they were completed. Policymakers will value these targeted assessments in their own right, and perhaps even more as a successful proof of principle that data analytical methods have great promise for steering national technology investments and policies.”

—Gerald Epstein, Contributing Scholar, Johns Hopkins Center for Health Security; Former Assistant Director for Biosecurity and Emerging Technologies, Office of Science and Technology Policy

“A meaningful national technological assessment requires new research methods, new collaborations, new institutions, and a new sense of urgency. This report from the NNCTA responds to these imperatives and provides a compelling direction for future work.”

—Adam Falk, President, Alfred P. Sloan Foundation

“This insightful report makes a compelling and well-documented case for a national office that spans agency missions, capable of deep analysis of critical technologies, the US position in these technologies, and the risks to continued US leadership and access. The country’s economic and national security are dependent on a number of key technologies, and a better and earlier understanding of these dependencies and the risks to them has become mandatory.”

—John Hennessy, Professor and President Emeritus, Stanford University

“This study demonstrated how networked teams of scholars and practitioners could effectively use models, tools, and datasets to aid decision makers who fund critical technology development and implementation. Multidisciplinary and geographically diverse teams brought new insights regarding necessary factors for critical technology assessment, particularly when there are national security, economic competitiveness, and social well-being considerations. The NNCTA report should be a resource to stakeholders in the government and private sector.”

—Kaye Husbands Fealing, Dean and Ivan Allen Jr. Chair, Ivan Allen College of Liberal Arts, Georgia Institute of Technology

“Turning innovation into economic opportunity necessitates clear insights and a strategic direction. This report on assessing critical technologies provides policymakers with a needed blueprint for guiding investments in research and innovation.”

—Farnam Jahanian, President, Carnegie Mellon University

“Virtually every goal we have as a nation, including national security, faster productivity growth, and shared prosperity, requires scientific and technological advances. If you want to learn how we can make better and more informed decisions about how to achieve these goals, read this report!”

—Tom Kalil, Former Deputy Director, Office of Science and Technology Policy

“US leadership in the critical technology areas that will be required for our global competitiveness can no longer be taken for granted. Using examples in several key technology areas, this must-read report shows how analytics can help inform our citizens, Congress, and federal agency leaders on where investments are needed to secure our future.”

—Willie E. May, AAAS President-Elect; Vice President of Research, Morgan State University; Former Director, National Institute of Standards and Technology

“NNCTA’s pilot year has demonstrated that we can—and must—develop and deploy analytical tools, processes, and human expertise to make decisions about our investments in the critical technologies that underpin our economic competitiveness, national security, and the equitable translation of the benefits of technology to all of society. The science of technology management is as important as any specific technology.”

—J. Michael McQuade, Former Senior Vice President S&T, United Technologies Corporation; Former Vice President of Research, Carnegie Mellon University

“NNCTA’s report highlights the urgent need to restructure how we deploy national funds to support the commercialization of technologies critical to US advantage.”

—Katie Rae, CEO and Managing Partner, The Engine

“This framework outlines a path forward that will enable us to invest in and accelerate America’s technological leadership. These recommendations have the potential to inform and reshape the way our nation innovates, taking us on a path toward a brighter, more technologically resilient future. As an investor and serial entrepreneur, I see this as an exciting proposition, and vital to a thriving economy.”

—Matthew Rogers, Founder and CEO, Mill, Founder Nest, and Incite.org

“The importance of investing in the nation’s technology future has never been greater. At the same time, the options are limitless and we need data-driven approaches to focus investments to the most promising areas. This report of the pilot year of the NNCTA demonstrates the potential of using the latest methods of machine learning and AI to harvest insights from data, guided by cross-disciplinary domain experts to put us on a firm footing for the future.”

—Rich Uhlig, Senior Fellow and Corporate Vice President, Director of Intel Labs

“The United States has the best innovation ecosystem in the world; harnessing this innovation to produce needed national security capabilities at the speed of relevance is where we sometimes struggle. This Critical Technology Assessment pilot shows a possible path forward on how to better focus our innovation efforts on the most important things.”

—Steven Walker, CTO, Lockheed Martin; Former Director, DARPA