

Testimony of U.S. Department of State Chief Data & AI Officer (CDAO)

Dr. Matthew Graviss

U.S. Senate Committee on Foreign Relations

November 15, 2023

Chairman Cardin, Ranking Member Risch, and distinguished Members of the Committee, thank you for the opportunity to speak with you today about the role of artificial intelligence (AI) in modernizing our diplomatic work around the world. I also want to recognize and thank the Committee for its interest and the work it is doing on this very important topic.

As the Department's first Chief Data & AI Officer, I lead the Office of Management Strategy & Solutions' Center for Analytics (CfA), which is spearheading efforts to use and scale responsible AI across the Department. The Center for Analytics is the Department's hub for data and applied AI, and we are leading in the implementation of the Foundations for Evidence-Based Policymaking Act, the new Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence, and the Advancing American AI Act. Our stellar team of data scientists, engineers, and policy analysts provide support to bureaus, offices, and overseas posts on priority projects, while also working with partners across the Department—including the Foreign Service Institute and the Bureau of Global Talent Management—to increase our collective data and AI capacity. As Ambassador Fick mentioned, the work of my team promotes AI internally at the Department, while his work is largely externally facing and focused on the Department's engagement with the international community.

President Biden's recent Executive Order on Safe, Secure, and Trustworthy AI makes clear that "AI can help government deliver better results for the American people," and the State Department is no exception. Just last week, Secretary Blinken signed the State Department's Strategy for AI-Powered Diplomacy, an important milestone in support of the Department's Modernization Agenda. The AI Strategy is an essential step to equipping the Department's world-class diplomatic corps with the analytics, training, safe infrastructure, and effective policies to execute efficiently on enduring and emerging policy challenges. As my

colleague Ambassador Fick pointed out, our leadership in technology foreign policy is stronger when we lead by example. That is why his office and my office work so closely together to share what we are learning and exchange information on future developments in AI technology at home and abroad.

It is an honor to be here today to share four key messages. First, our work responds to the high demand for data and AI needs from across all corners of the Department to meet foreign policy objectives. Second, we upskill and empower our workforce at all levels to deliver on behalf of the American people. Third, the Department has tested and proven approaches to turn data and responsible AI into insights and efficiency gains. Fourth, the Department is prioritizing the ethical and responsible deployment of AI to both seize its promise and manage its risks.

On the first, we witness every day how the demand for data and AI across the Department continues to grow. We have delivered AI and advanced analytics projects in collaboration with over 48 bureaus and offices, with the majority of projects directly supporting U.S. foreign policy objectives, and the rest focused on expanding the operational efficiency of the Department. The demand continues to grow. In the last three years, we've received over 350 requests for support, demonstrating the significant interest in modern data and AI solutions across the Department's components.

Second, through our workforce development initiatives, we are placing federal data science and AI expertise as close to the mission as possible. My office has led two Department-wide hiring initiatives for data scientists, hired bureau-level chief data officers, and created a standardized locally employed staff data scientist position to enable embassies and consulates worldwide to hire expertise easily and efficiently. Additionally, with a focus on broadening data analysis and AI skills, Department employees have taken 62,000 hours of related training, and our team has incorporated data modules into foreign service tradecraft courses and Chief of Mission onboarding seminars. This success demonstrates the tremendous value of President Biden's National AI Talent Surge for increasing government AI capacity.

Third, Data and AI have already impacted American diplomacy by equipping the right people with the right insights at the right time to use information to provide

advantages in international negotiations. The Special Presidential Envoy for Climate did exactly that last year at COP27, where the United States included a data scientist in its delegation. This decision allowed us to model the impact of other countries' proposed policy changes on environmental conditions in near-real time while negotiations were ongoing – helping us hold countries to account and push for ambitious commitments to achieve climate goals. Elsewhere, the Bureau of Conflict and Stabilization Operations uses computer vision and machine learning to document war crimes in Ukraine through commercial satellite imagery; and the Bureau of International Organization Affairs analyzes votes in the United Nations to better target our resolution and election priorities. In these and many other examples, data analytics and AI are strengthening the capabilities of our world-class diplomatic corps.

But we're doing more than providing a decision advantage to U.S. foreign policy practitioners; AI and data analytics are also making the Department more efficient: for decades, the statutorily required declassification process has been entirely manual, requiring thousands of staff-hours and millions of dollars to execute. We and our partners in the Bureau of Administration developed a machine learning platform to accelerate this process by predictively marking cables for declassification, continued classification, or further human review. In our testing, the model has been over 97 percent accurate and over 60 percent faster than manual review alone – even accounting for the time needed for human oversight. As we continue to put this model to use, we are seeing the error rate improve even more. In addition to saving thousands of staff-hours per year, this approach also safeguards national security information from erroneous public disclosure. With this solution, we are able to review every cable by statutory deadline, as by statute, documents that are not reviewed on time are automatically declassified.

Fourth, none of these burden reducing or foreign policy gains would be possible without good data quality and responsible and trustworthy AI policy and guidelines. In the past year, the Department has published the first AI policy, updated its AI use case inventory, and established a Responsible AI toolkit. We have also appointed a Responsible AI Official and launched an AI Steering Committee, the Department's governance body charged with advancing responsible AI principles and ensuring adherence to federal AI guidance. As we

continue to take advantage of opportunities to leverage the power of AI and the technology evolves, we will actively learn from our experiences and that of our partners and outside experts to refine our policies and ensure we have appropriate protections in place for its use in the Department.

As the United States promotes a vision of responsible AI around the world, we believe the Department must lead by example in leveraging AI responsibly in our own work. As Secretary Blinken has said, our workforce is “better prepared to engage diplomatically, manage effectively, and lead globally” when it has the data it needs when it needs it. AI and advanced analytics enhance the power of data and accelerate our workforce’s potential. We are absolutely committed to pursuing U.S. foreign policy and operational advantages at scale in a safe, secure, and trustworthy way.

Thank you very much for inviting me here today. I look forward to answering your questions and to working with you to realize the vast potential of responsible AI.