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STATEMENT FOR THE RECORD

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“Toward An AI Ready Workforce”

SubCommittee on Cybersecurity, Information Technology, and Government Innovation

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Thank you for inviting me to share a statement for the record for this hearing on building an AI Ready Workforce, which reflects my professional expertise and is not a position of Johns Hopkins University or Medicine.

For more than 20 years, I have worked to increase the capacity of public sector organizations to build data-fluent workforces and harness data to generate public value and improve public services while strengthening the research and evidence base around data practices that work. Most recently, I served as a Deputy Assistant Secretary at the U.S. Department of the Treasury where I led government-wide data and modernization reforms to make the federal government more transparent and effective. In that capacity, I led the policy development and implementation of the first open data law in the U.S.– the Digital Accountability and Transparency Act of 2014 (DATA Act) – which standardized data for more than \$6 trillion in annual spend and enabled taxpayers to monitor how federal funds are allocated and trace those funds to direct investments in their communities. Previously, I was the Director of the Task Force on Government Performance for the U.S. Senate Budget Committee where I led reforms to increase the use of data for Congressional decision-making.

Today, I lead the Bloomberg Center for Government Excellence (GovEx) at Johns Hopkins University with a simple yet ambitious goal: to help governments, primarily cities, use data effectively to improve the lives of residents across the United States and around the globe. Over the past eight years, GovEx has established itself as a global leader, working alongside thousands of public officials to achieve our goal. We are the go-to resource for governments as they seek to improve data proficiency and develop data-driven policy solutions drawing on the most cutting-edge technology, including AI and advanced analytics. Technological progress can present unique challenges in the public sector, but, where some see barriers, we see opportunities.

### **The AI Opportunity**

AI has the potential to greatly improve the lives of people across the globe and governments at all levels need to better prepare to harness this opportunity. Governments must work to shore up the most fundamental data practices to be able to safely adopt and utilize these technologies. When

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public institutions attempt to dive into the deep end of analytics, automation, or machine learning without first building a strong data practice, they run the risk of propagating disparate impacts, poorly informing decisions, and creating bad outcomes. Responsible adoption of AI demands high-quality data to understand public operations in new ways. When done right, a strong data practice will lead to safer AI implementation that will anticipate resident needs and promote safer, more efficient, healthier, thriving communities.

As AI technology continues to advance, the public sector is at risk of falling further behind on the skills needed to responsibly use this technology. The workforce is the key to unlocking the full power of AI to improve public service delivery. The entire government workforce will need to understand the fundamentals of AI in order to manage the technology, the processes, and the policy implications. We have learned from our work that local leaders are eager to adopt tools and practices that help them respond to constituents' needs better, faster, and more safely. However, there are multiple barriers to exploring the practical applications of AI in government operations, including but not limited to: insufficient technical expertise, lack of awareness of the possibilities, budgetary constraints, and reduced research and development funding.

### **Data is Everyone's Job**

In order to prepare the workforce to leverage AI and use data effectively – we must acknowledge that the entire workforce needs fundamental data literacy. Data is everyone's job. All public sector employees from front-line service providers to middle managers and senior executives need more knowledge about how data is collected, how it is used, and how to govern it responsibly. As data becomes a more widely used asset with AI, there will be more data collected, potentially centralized analytics teams using it, transforming, and repurposing the data. It will be critical for the workforce to understand the data pipeline, the risks and how to responsibly interpret the data. Capacity-building efforts should include the entire public sector workforce, not only the designated AI or data leaders and technologists.

To be clear, it is essential to have core data and AI expertise in government. We encourage every city we work with to have a Chief Data Officer and to designate a senior leader who knows when to deploy AI (and when not to); someone who can influence service design; and someone with the power/authority to lead governance and technical strategy while asking the right questions. But these central data leaders need support from the full workforce. Front-line staff should have fundamental data literacy skills that help them understand how the data that they are reporting will be used and the value of timely high quality data. Executives should also have a more technical understanding of how these technologies work in order to oversee the application of AI and ensure that the technology and data are used responsibly.

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At GovEx, we work with City leaders to develop a data strategy that includes a targeted workforce plan that would be helpful to all levels of government. A data workforce plan should include four key components:

1. **Assess workforce data capacity and AI knowledge.** Public sector leaders should assess the current data literacy and analytic levels of their workforce to better understand skill gaps and develop tools and training to strengthen knowledge and capacity to collect, analyze, or use data to inform decision-making – ultimately advancing AI practices. The assessments can review departmental, office, or individual skills levels to target resources to the highest priorities and build capacity over time. Governments should regularly assess to ensure their strategies are effective and sustained.
2. **Build core data skills.** The entire workforce should have a fundamental understanding of the value and power of data and how it is being used to inform and drive decisions in alignment with leadership goals. Staff at every level across the organization have a role to play in ensuring data is collected, stored, used, interpreted and protected properly and understand their role in the data pipeline. Leaders should identify opportunities for skill building and create a plan with human resource professionals focused on continuous learning for staff at all levels to sharpen or gain data knowledge. Data workforce plans should explicitly include a focus on continuous learning.
3. **Recruit and retain diverse data talent.** Data expertise is in high-demand and it is often hard for the public sector to recruit and retain the needed talent. Governments must consider widening the net on where and how they recruit. Data workforce plans should identify recruitment strategies that reflect this diversification. For example, governments could include a pipeline in partnership with local colleges and universities, build internships to attract the needed skills, or create a fellowship for existing employees that deepens skills and creates new career pathways. Hiring managers must build data skills into job descriptions and build onboarding plans for new staff that provide an introduction to the data-driven culture from day one. Governments should also consider the career advancement path for data professionals so that they can retain these critical skills through a defined career track.
4. **Sustain a data culture.** Developing and sustaining a data-driven culture is a challenge for most organizations. Data Workforce Plans should include efforts to capture the existing data knowledge and succession planning for critical data functions to ensure that expertise can be transferred and retained. Workforce plans must also address creating and sustaining an environment that encourages data talent to collaborate, contribute, evolve, and lead the data landscape. Data professionals are continuously looking for opportunities to learn from each other and to innovate. Creating the space for this is critical to your workforce plan.

Last year, GovEx worked with the city of Baltimore to launch the Baltimore Data Academy, a groundbreaking training resource designed to equip staff in all areas of city government with

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foundational data literacy skills. Since the Academy launched in February, more than 500 employees across 15 agencies have enrolled in courses and GovEx is advising several other cities to replicate the Academy.

In my experience, attracting and retaining needed technical talent is one of government's biggest challenges. The demand for data and AI skills is only going to increase and governments need to build a career track for public sector data and AI professionals that would allow the workforce to see a career path in government where they can advance their careers instead of exiting for the private sector. Today, many job descriptions for data and AI professionals are outdated, if they exist at all. Human resources policies and regulations have been outpaced by the evolution of technology, public sector innovation, and changing workforce needs, values, and expectations. As a result of these limitations, many public sector leaders hire contractors to meet their data needs – while this can be helpful, responsible use of data and AI require knowledge and expertise inside the government to better assess policy implications and risk.

In the past few years, the U.S. Office of Personnel Management (OPM) and the Federal Chief Data Officers Council have taken some noteworthy steps to better define the role of data scientists at the federal level and to jointly recruit this talent across multiple agencies. In 2021, OPM released a [new occupational series for data scientists](#), which allowed agencies to recruit for multiple open roles. While this is an encouraging step from OPM, it took more than two years to put the series in place. The need for more technical talent outpaces the speed in which the government can act.

### **Responsible AI Experimentation**

In order to maximize the use of AI in public organizations, governments must invest in increasing their capacity for technology adoption across all levels and program areas. This means that we need to attract new skills to the public sector, we need to elevate the capacity of the current workforce, and we need to start investing in the creation of public space to experiment with new AI-powered technologies. In the absence of public leadership, we run the risk of being outpaced and undermined by the private sector, a risk that will lead to more expensive and less effective interventions.

Consistently, local leaders ask how they can create an environment that allows for experimentation while maintaining appropriate protections from harm. As local leaders consider the use of AI we have offered five recommendations to support their work:

1. Designate a senior leader: This should be a trusted partner who knows when to deploy AI (and when not to); someone who can influence service design; and someone with the power/authority to lead governance and technical strategy while asking the right questions.



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2. Learn with the team: Create an evolving learning agenda for AI; find out what people in your communities' public, private, and academic sectors are already doing with AI; and measure what works – and what doesn't.
  3. Share early guidance: Be transparent about when AI is deployed; assess the risks; take precautions to avoid bias in delivery; create and communicate an acceptable use policy; and bring people to the table to discuss.
  4. Explore what you already have: Tackle an issue that matters (but manage the risk). Ideally, this will be a quick win that will relieve the workforce and improve an outcome for the public without disrupting the delivery of key services.
  5. Create space for experimentation: Integrate a review of your AI implementation into ongoing performance routines; be clear before implementation about what success looks like; track progress; and give your team the right balance of space and support.

Thank you for the opportunity to share my views on creating a more AI-ready workforce with the Committee. I am available for questions or follow-up in support of the Committee's ongoing work.