

Senate HELP Committee's Subcommittee on Employment and Workplace Safety:

I am appreciative of the privilege to testify here today. My name is Tyrance Billingsley II and I am the Founder and Executive Director of Black Tech Street, an initiative to rebirth historic Black Wall Street as a Black Innovation Economy and catalyze a movement that sees Black Americans embrace technology as a wealth-building and global impact mechanism. Black Tech Street was founded when I asked myself, "What could Black Wall Street have been if it had been supported and not destroyed?"

When I thought about the level of tenacity that it took for these black entrepreneurs to build successful businesses during Jim Crow in my hometown of Tulsa, OK, I immediately saw parallels with the tech industry and not long after, I came to a three-pronged epiphany:

- 1. Tech is one of the only industries in which intergenerational wealth is generated in 7-10 years via successful company exit.
- **2.** Tech is the core medium through which all global innovation takes place.
- **3.** By the year 2030, there are projected to be as many as 4.3 million vacant high-paying jobs due to a tech talent shortage.

After considering these three things, I not only saw the perfect wealth-building opportunity for Black Americans, but I also saw the Black Wall Street vision pushed to a new horizon. I surmised that if Black Wall Street were supported and not destroyed, it would be nothing other than the nation's premiere Black Innovation Economy. Focusing on the three verticals of cybersecurity, business intelligence/data analytics and responsible artificial intelligence, Black Tech Street was founded on the premise that technology presents unparalleled economic opportunity.

A key word here is *responsible* AI. And back in Oklahoma, we are taking a community-first approach and not just relying on Big Tech to address how AI can be a responsible tool for the benefit of our communities and entrepreneurs.

To that end, this organization has brokered a holistic alliance with Microsoft to support the creation of 1000 Black Cyber and Cyber adjacent professionals in Tulsa by the year 2030, facilitate the participation of over 70 Black Tulsans in the largest public AI Red Teaming exercise at DEF CON 31, and co-lead the Tulsa Hub for Equitable and Trustworthy Autonomy consortium that recently received a U.S. Economic

Development Agency Regional tech hubs designation alongside Tulsa Innovation Labs and the George Kaiser Family Foundation.

While we believe that all of our work is critical, the conversation around AI is on an entirely different level of urgency and importance. Artificial intelligence will not just disrupt lives; it will remake the world. Perhaps most urgently, AI will fundamentally transform the workforce, which is the lifeblood of any well functioning society and economy. In truth, the workforce will be the first area where we truly see the power transformation of AI at scale, whether this be in the innovation economy, the creative economy or one of the many other facets.

Whether or not we ensure AI secures a beneficial arrangement for people in the future of work will set a precedent for how AI is administered in all facets of life. If the systems for AI in the workforce are designed in a human centered way, AI could be a tool to fundamentally alter the socioeconomic position of marginalized communities in this country, or it could exacerbate pre-existing inequities in a way that is almost irreparable.

To that end, I believe there are four critical guidelines that can help us ensure that the future of work built by AI is safe, equitable and beneficial for the American worker and economy.

- **1.** Approach the regulation of AI and the issues that surround it in the workforce (and more broadly) as a sociotechnical issue. Complex or "wicked" sociotechnical issues are problems:
  - That resist resolution despite repeated attempts
  - Are difficult to describe or predict
  - Are not addressable by single individuals or organizations
  - Are not addressable in a single intervention and require multiple co-ordinated interventions
  - The most critical question is discerning "Where to focus?" followed by what to do, when and how.
- **2.** Develop a worker centered AI social contract for the workforce that:
  - Defines the rules of use and engagement as they relate to AI for both employees and employers.
  - Is rooted in framing and incentivizing AI as a co-pilot to enhance human creativity, productivity and output.
  - Sets the precedent for the policies and systems that define how AI can/should be used in relation to workers as most critical to the future of work vs what the technology can do or is capable of.
  - Displays a stable framework for using AI to unleash human potential in a way that also leads to better profit and performance for companies.
- **3.** Overindex and incentivize training and education programs that target POC and marginalized communities that have been historically left out of technological revolutions.
- **4.** Develop the framework for AI and the future of work in a way that strengthens the intersection between workforce and high growth, as well as small business entrepreneurship.

I believe that these four guiding principles and the inclusion of communities like Tulsa in these conversations will be the keys to ensuring that we utilize AI to build a future of work that unleashes the true potential of the labor force and powers the American economy of the 21st century.

#### AI and the Future of Work: A Sociotechnical Approach

With complex sociotechnical problems, the first issue at hand is often to discern "where to focus". The entirety of the questions around AI and how it will remake our world could be defined and, in my opinion, should be approached like a complex sociotechnical problem. However, "AI and the Future of Work" presents a specific subset of the issues that can be focused on, as it is the most imminent of the AI issues that will have a visible and tangible effect at scale.

I believe that "AI and the Future of Work " is a sociotechnical problem in and of itself that needs to be addressed and can then provide a framework for addressing AI issues more broadly as it relates to ensuring the future we build is equitable, safe, trustworthy and beneficial.

Albert Einstein said, "If I had 20 days to solve a problem, I would take 19 to define it." Identifying a true problem can be difficult, especially in a complex sociotechnical problem, because there is rarely just one. In cases like these, we have to think in terms of two questions:

- 1. "Which problems are most urgent for me to solve?"
- 2. "Which problems are the ones that, if I solve or make progress on, will have a domino effect on solving for the greatest number of other problems due to the multifaceted and interconnected nature of the issue I am tackling?"

To answer these questions, one can use a method called **"catalytic factor analysis"**. Catalytic Factor Analysis is based on a method designed to identify which keystone species in an ecosystem are critical to success, i.e., if a certain species were to flourish or flounder, would the overarching effect on the ecosystem be positive or negative in relation to the health of the ecosystem.

It starts with a 5 step process of:

- 1. Identify a "North Star" for AI and the Future of Work.
- 2. Gather a room of key experts in AI and the workforce from FOW thought leaders, policy experts, labor lawyers, human rights activists and technologists to identify the root factors relating to AI and workforce/the future of work.
- 3. Have the experts collectively rank the problems in a survey based on their "catalytic" nature and their urgency as it relates to securing the "North Star" as it relates to AI and the Future of Work.
- 4. Conduct an exercise using a tool that utilizes catalytic factor analysis to identify which factors in the system are catalytic.
- 5. Prioritize research, funding and public private sector efforts to mobilize and solve (or take steps to solve) the factors that were deemed catalytic.

The thesis is that, with the opinion of the blended participants of experts from various fields touching AI and workforce, the outcome will be an accurate network map of catalytic factors that can be actioned against in various ways and from various players in the public and private sectors. This will allow the federal government and other stakeholders to know what to prioritize and where to pour funding and efforts in terms of solving the issues that are most urgent, as well as maximizing efficiency by tackling issues that will go the longest way in tackling others related to AI and the workforce overall.

#### Workers Social Contract in The Age of AI

Whether it be the SAG-AFTRA strike in Hollywood or the nuance around AI's use in the workplace of different industries, it is clear that there needs to be a workers social contract for AI that governs its use, both by the employee and the employer. The need for this is something that would likely be identified as a result of the study above if it were to be done; it is the baseline of the entire AI and the Future of Work conversation. At some point, there will need to be a new social contract for everyone as it relates to AI more broadly, but once again, the workforce will likely be the first example of how this plays out (and thus set the pace for the broader conversation).

This contract has to not only govern AI in the workforce but also create a culture where AI is viewed as a copilot to enhance creativity and productivity, set the precedent in the public and private sectors of prioritizing how AI is used in relation to workers and work as most important vs just what the tech is capable of, and maximize both human potential and profitability for the companies.

## Overindexing investment in education and training in POC communities

POC communities have historically been left out of technological revolutions that result in massive wealth and other socioeconomic disparities. The opportunity and dangers presented by AI could fundamentally alter the socioeconomic position of POC in America forever, and this can either be good or bad. If the funding and infrastructure are not sufficient to ensure that POC are educated, trained and proficient in AI prior to widespread adoption and further technological innovation, the economic effect could be catastrophic nationwide. Conversely, if the right care is taken, AI could be the catalyst that goes towards remedying many of the socioeconomic disparities that resist solution.

## AI Workforce and The Intersection of Entrepreneurship

If sufficient care is taken to truly ensure AI is well applied to the future of work and the efforts are successful, the workplace will be the perfect place to build proficiency with AI in a way that will poise participants in the labor market to take up the entrepreneurial spirit and use their learned proficiency in AI to start small or high growth businesses based on their experiences. The higher the level at which we succeed as it relates to a framework for AI and the Future of Work, the better the backbone of the other parts of the American economy that depend on the labor force, such as entrepreneurship and academic research.

# Support for FY24 Appropriations to Spur Innovation

Lastly, none of these efforts will succeed without adequate government funding and support.

In the immediate future, I urge Congress to support the following FY24 appropriations to support organizations like Black Tech Street and Tulsa Innovation Labs back home in Oklahoma in their efforts to innovate:

- President Biden's FY24 Budget Proposal showed the administration's investment in science and innovation through his proposed FY24 budget requests. As Congress seeks to finalize its NSF and CJS budgets; as such please, consider fully funding the following programs which provide federal resources to support key programs that aid Black Tech Street in transforming Oklahoma.
- The Department of Commerce, Justice and Science Appropriations ("CJS"): The Senate Appropriations Committee's CJS bill would provide \$71.7B, \$10.3B below the FY23 enacted level, and \$19.5B less than President Biden's FY24 budget request. While the House Appropriations Committee has not passed a bill, the House subcommittee approved the CJS bill for a total of \$58.4B, which is \$24.9B below the current level, and \$34.2B below President Biden's FY24 budget request.

Within the CSJ, there are key programs that are vital to Black Tech Street and its partners.

CJS Program	FY23 Final	FY24 President	FY24 House Subcommittee	FY24 Senate	Black Wall Street Request
Dept. of Commerce	\$11.1B	\$12.4B	\$9.6B	\$11.1B	\$11.1B
EDA	\$1.6B	\$804M	\$255M	\$466M	\$804M

These include but are not limited to the following:

		*\$4B for Regional Tech Hubs			
Regional Technology and Innovation Hub Program	\$500M* *Funds to jumpstart program in supplemental	\$4B	-	\$41M	\$4B
Regional Innovation Engines Program	\$170M* *Directed at least \$170M	\$300M		\$200M	\$300M
Minority Business Development Agency	\$68M	\$110M	\$55M	\$70M	\$110M
STEM	\$1.2B	\$1.4B	\$2.5M	\$2.5M	\$2.5M

• The Black Tech Street supports President Biden's request of \$4B to build on the one-time \$500 million provided in the Consolidated Appropriations Act, 2023. This funding would enable EDA to establish cutting-edge and strategic regional technology hubs that foster the geographic diversity of innovation and create quality jobs in underserved and vulnerable communities across the Nation—including our communities in the northern region of Tulsa.

 Within the Small Business Administration, the Black Tech Street supports President Biden's request and asks that \$30M for SBA's Growth Accelerator Fund Competition, Regional Innovation Clusters, and the Federal and State Technology Partnership Program; \$30M for the Community Navigator Pilot Program; and increasing the authorized lending level for the SBIC program by 20% to \$6B is honored by Congress.

**The National Science Foundation ("NSF"):** Additionally, as part of the CSJ bill, President Biden's requested a total of requests \$11.3 billion in discretionary budget authority for 2024, a \$1.8 billion or 18.6-percent increase from the 2023 enacted level.

Within the NSF portion of the CSJ, there are key programs that are vital to Black Tech Street and its partners. These include but are not limited to the following:

NSF Program	FY23 Final	FY24 President	FY24 House	FY24 Senate	Black Wall Street Request
STEM Workforce	\$1.2B	\$1.4B	\$2.5M	\$2.5M	-
Scientific & Technological Advances	-	\$2B	-	-	-
U.S. Leadership in Emerging Technologies	-	\$1.2B	\$300M	-	-
Research Activities for CHIPS and Science Act	\$9.87B	\$11.3B	\$9.6B	\$9.5B	\$11.3B

- Black Tech Street supports President Biden's request of \$1.4B in funding to STEM workforce development which is vitally important for the advancements in innovation by American workers.
- Black Tech Street supports the President's request of \$1.2B in advancing U.S. leadership in emerging technologies—as a network of partners located in Oklahoma, our challenges to recruit and retain talented innovators faces both domestic and global competition. We support policy that supports keeping American jobs in America and applaud the President's request for this funding as part of NSF.
- Black Tech Street also supports the \$7.6B for NSF's research and related activities and the \$11B allocated by the Senate to implement the CHIPS and Science Act.

We are hopeful with the passage of the CJS bill and its NSF funding, Congress can continue to support innovation and advancements in commerce, science, innovation, and technologies that community partners like Black Tech Street work on each day for all Americans.

We are confident the above recommendations are a step in the right direction for our Nation's future.

Respectfully submitted,

Tyrance Billingsley II, Founder & Executive Director of Black Tech Street