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TESTIMONY OF

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BEFORE

Committee on Homeland Security Subcommittee on Cybersecurity and Infrastructure Protection

ON

"Growing the National Cybersecurity Talent Pipeline"

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Chairman Garbarino and Ranking Member Swalwell, distinguished members of the Committee—thank you for the privilege to appear before you today on behalf of NPower to discuss growing our national cybersecurity workforce talent pipeline.

My name is Chris Starling, I am a retired colonel of the U.S. Marine Corp, where I served for over 26 years. Since 2019, I joined NPower to run our program in the Bay Area.

NPower is the premiere technology training organization providing young adults, veterans, and Women of Color from underrepresented communities with free tech training, social and emotional support, and full-time job placement assistance with many of the nation's leading employers. Annually, we serve over 1,300 unemployed and underemployed students across the country with high-quality tech workforce training leading to industry certification, with social support, professional development, and job placement services.

We work at the intersection of poverty alleviation, equity, workforce diversity and the tech industry. Our program is delivered free of charge to men and women earning less than 200 percent of the federal poverty level, and they primarily come from racial and socioeconomic backgrounds underrepresented in the tech industry.

Technology is one of the main drivers of the US economy, and the demand for talent constantly outpaces the supply of skilled workers. Experts project tech sector employment to grow at the fastest rate of all occupations – and people simply aren't entering the field fast enough to replace retiring workers. Various factors are driving the increase, from innovations to natural disasters to the Covid pandemic, which prompted the whole country to work and deliver services remotely.

In addition to the shortage of skilled talent, there's an enduring lack of diversity in the IT workforce that has long been recognized as a systemic national problem. Many tech job seekers today lack college degrees and therefore are overlooked in the talent sourcing of many companies. NPower meets

learners where they are and offers them industry-recognized certifications and certificates to demonstrate their skill over pedigree.

At NPower, we believe access to high-growth careers is possible for anyone, no matter where you start. We believe this is our key to creating a world where equity is possible. We blend best-in-class and trauma-informed tech training and personal support, to constantly innovate new ways to foster talent. A specialized team of Social Support Managers provide 360-degree support services by connecting our students with city and social service agencies for all their social and emotional needs.

With our approach, we're building a new kind of pipeline to tech careers. Our students don't come from traditional backgrounds and many of them come to us at a pivotal moment of transition in their lives. We don't see that as a hindrance: we recognize their worth as powerful assets in their local communities. With our comprehensive support, they can leverage their own internal hunger, grit, and determination to drive change in their personal and professional lives.

NPower's Key Workforce Performance Metrics

NPower has trained 560 individuals from under-resourced communities in cybersecurity since 2015.

NPower evaluates impact based on program completion, attainment of industry credentials, and placement in quality jobs or continuing education. Our Key Performance Metrics map directly to the Workforce Innovation and Opportunity Act (WIOA) performance metrics used by most workforce development programs. Below are our impact metrics for our cybersecurity program:

- 85 percent of enrolled students complete training on time and graduate
- 88 percent of graduates secure at least one industry-recognized credential
- 81 percent of graduates are placed in quality employment or enrolled in continuing education at six months and one year after graduation

We track Measurable Skills Gains through demonstrated mastery of key competencies in hands-on labs and assignments, tracked through our custom Learning Management System.

We also track income growth pre- and post-program. Consistently, at their first job post-program, NPower graduates achieve an immediate and dramatic salary increase that meets or exceeds the MIT Living Wage for their region. On average NPower graduates saw an average increase of roughly 420 percent, rising from an average pre-program income of $9,374 to an average post-program salary of $43,260. For our cybersecurity graduates their post-program wage average is $63,372! Their wages continue to grow as they gain experience, and the positions for which we train are designated by the U.S. Department of Labor as "Launchpad Occupations" with higher-than-average salary growth. Our team continues to reach out to alumni periodically after the initial job placement to support and track job retention, promotions, raises, and overall career trajectory.

Cybersecurity Infrastructure and Security Agency (CISA) NPower Grant:

In 2021, CISA awarded NPower a $1 million grant for the development of cyber workforce training. The partnership focuses on the development of a scalable and repeatable proof of concept to identify and train talented individuals around the country and help address the staggering cybersecurity workforce

shortage facing our nation, while also meeting the dynamic needs of the cybersecurity workplace. CISA supports non-traditional job training and apprenticeship programs like NPower and acknowledges that more readied talent could lead federal government, state, local, tribal and territorial entities, as well as private sector employers to address current and future cyber workforce needs.

The program has been successful thus far:

- Fall 2021
  - 91% job placement
- Spring 2022
  - 100% retention
  - 100% certification
  - 72% job placement
- Fall 2022 (mixed TF & Cyber)
  - 100% retention
  - 82% certification
  - 77% placement
- Spring 2023: Week 16
  - 100% retention
  - 50% certification
    - Certification is in progress

Policy Recommendations

We would like to offer to the committee the following policy recommendations as you seek to address the cybersecurity workforce shortages:

1. Establish a permanent program that includes the core principles of the pilot program on which CISA is currently collaborating with NPower. Expanding the pool of cyber talent requires sustainable and adequate funding.

   Core Principles of the Program are:

   - Partner with nonprofits and government agencies to upskill men and women from underserved communities;
   - Invest in credential-focused short-duration cybersecurity workforce training programs that enable them to earn while learning;
   - Provide professional and soft skills development training alongside technical skills training;
   - Provide wraparound social support to ensure basic needs for housing, food and childcare, eliminating the barriers to success;
   - Provide job placement support and ensure they gain crucial paid work experience;
   - Engage and incentivize employers to shift hiring practices to focus more on skills-based hiring, nontraditional talent and apprenticeships;
   - Create direct talent pipelines from training programs to employers;

- Support long-term career pathways with plenty of training on-ramps and off-ramps, recognizing it may take individual workers years of entry-level tech training, alternating with work, and continuing education to attain a journeyman's level of cybersecurity expertise.

2. Invest in Platforms for On-Demand Help Desk support for individuals, nonprofits and small businesses. NPower is spearheading a national network of Community Help Desks that provide free technical assistance and digital navigation to local underserved communities, staffed by graduates of our tech workforce training programs gaining vital work experience as Registered Apprentices. NPower's programs are aligned to national standards for U.S. Dept. of Labor Registered Apprenticeship Programs.
    - Community Help Desks provide critical human support to help people on the wrong side of the Digital Divide take advantage of online job, health and education resources, while offering trainees the opportunity to build their resume through a paid apprenticeship.
    - The Community Help Desk will serve as an especially vital resource to local underserved seniors, public school families, adult learners, and jobseekers. The model capitalizes on partnerships with community-based organizations, and can provide a central hub for affordable connectivity and device distribution.

3. Modernize and reform Federal workforce hiring practices to adopt skill-based hiring practices and the Registered Apprenticeship model for technical roles. This allows the Federal government to compete for a talented and diverse workforce pool that prioritizes skills and a candidate's ability to do the job, and leads by example in equity-focused workforce development

4. Establish a grant program within the Department of Labor to support the creation, implementation, and the expansion of registered apprenticeships in Cybersecurity and Information Technology, modelled on high growth state apprenticeship programs such as California, Texas and Michigan. Specifically, the Secretary of Labor should provide grants, on a competitive basis, to support the establishment, implementation, and expansion of registered apprenticeship programs in cybersecurity and technology.

5. Integrate relevant state and federal policy issues into cybersecurity workforce training programs. A growing contingent of cybersecurity job openings require both technical and legal knowledge to guide companies on issues of privacy and security.

6. Capitalize on the promising talent pool of military-connected individuals and families, including transitioning Military Servicemembers, Veterans, Reservists, National Guard, and their often-overlooked spouses. Department of Defense statistics show 80% of military leave service without another job in place. The protective nature of military service leaves them well-suited for a cybersecurity career, and many already carry higher-level security clearances from their military years. They are a diverse group, with a majority who come from racially and socioeconomically marginalized populations. Military-connected individuals offer an especially promising talent pool from which to grow a strong, diverse cybersecurity workforce.

Conclusion

To address our cybersecurity workforce, we must find innovative ways to grow our workforce talent pool. For us, a key component has been embedding cybersecurity skills, concepts, and competencies throughout our expanded learning pathways. In addition, we seek to provide security awareness support services and troubleshooting to underrepresented communities as part of our national community help desk.

We believe the key to unpacking this unlimited potential and talent comes from building training and support programs to command a shift by partnering with government, industry, and employer partners in recruiting, hiring, assessing skills and competencies, and supporting people into cyber tech careers from various learning pathway.

Thank you for the opportunity to appear before you today and I look forward to taking your questions.