



# The Human Capital Triad for Cyber Retention

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A wide-angle photograph of a desert landscape. In the foreground, there are several saguaro cacti and a cholla cactus. The middle ground shows a range of rugged mountains under a blue sky with scattered white clouds. The bottom of the image features a decorative border with a repeating pattern of white and red chevrons pointing to the left.

**2024 IHS PARTNERSHIP CONFERENCE AND  
DIRECT SERVICE TRIBES NATIONAL MEETING**

*Advancing Native Health: As long as the grass grows and the rivers flow...*

**August 13–15, 2024**

# Scope of the Issue

**500,000**

**Cyber Vacancies in U.S.**

Source: National Cyber Director

**~75,000**

**Cyber Vacancies in the Government**

Source: Bureau of Labor & Statistics

**More than half of significant cyber incidents will come from a lack of talent as well as general human error.**

Prediction by 2025  
Source: Gartner

**10-15% higher attrition rate**

**For cyber security professionals over other IT personnel**

Source: Gartner

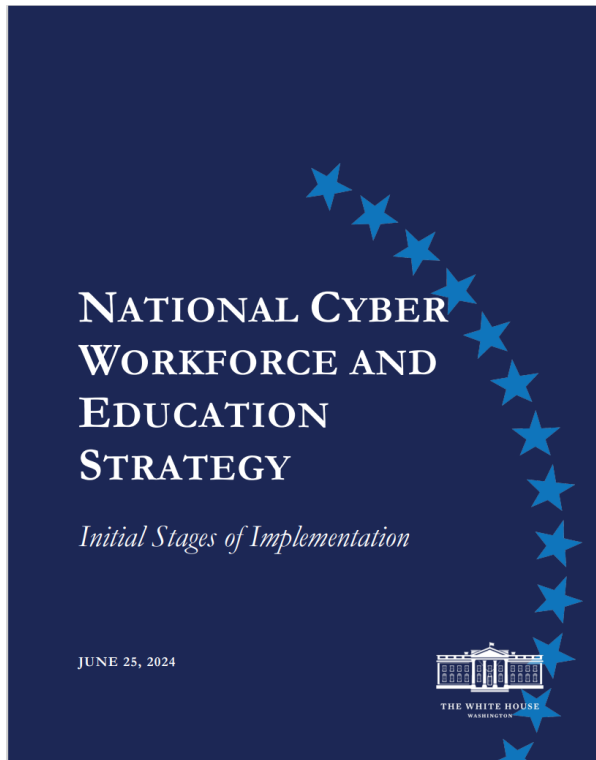
**21% longer to fill than other IT roles and cybersecurity positions**

Source: National Defense Magazine

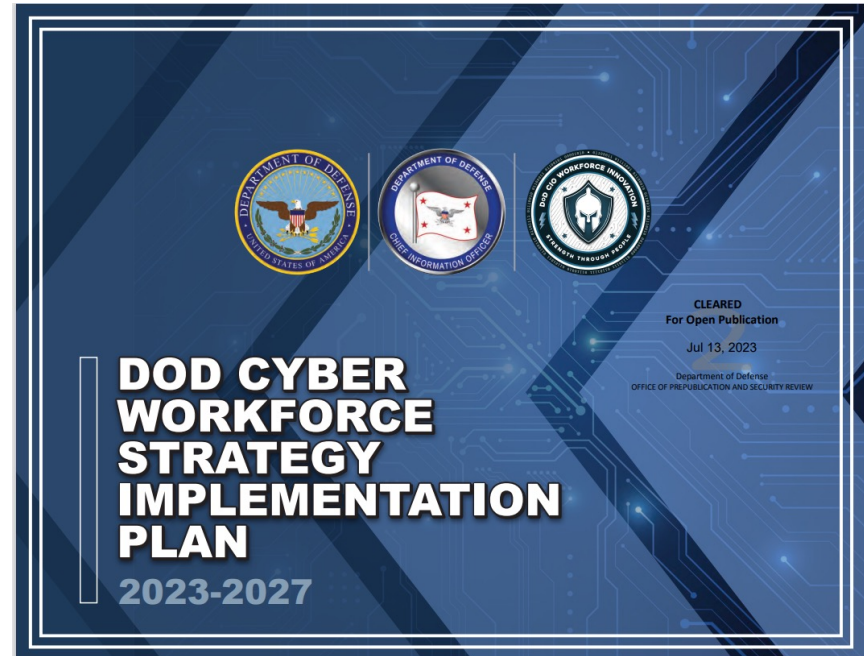
**83% males/17% female**

**Cybersecurity lack of diversity**

# Federal Cyber Personnel Guidance



National strategic objectives for training and producing more cyber talent to address the national shortage



Advancing a unified management of the cyber workforce for DoD and change the way they recruit, develop and retain their staff.

# Cyber Personnel Guidance (NIST)

**NIST Special Publication 800-181  
Revision 1**

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## **Workforce Framework for Cybersecurity (NICE Framework)**

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Common language to describe cyber work and the skills required

NIST Special Publication 800-53  
Revision 5

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## **Security and Privacy Controls for Information Systems and Organizations**

Personnel Security (PS) and Awareness and Training (AT) control families

**NIST Special Publication 800-16  
Revision 1 (3<sup>rd</sup> Draft)**

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## **A Role-Based Model for Federal Information Technology/ Cybersecurity Training**

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Model for creating training programs for IT professionals

NIST Special Publication 800-50

**NIST**  
**National Institute of  
Standards and Technology**  
Technology Administration  
U.S. Department of Commerce

## **Building an Information Technology Security Awareness and Training Program**

Mark Wilson and Joan Hash

Guidelines to establish IT security/awareness programs

## Other Efforts

- National Defense Authorization Act- provisions to enhance cyber workforce development
- CyberCorps Scholarship for Service- Funded by National Science Foundation and DHS, provides scholarships to those pursuing cyber-related degrees.
- DoD Cyber Scholarship Program (CySP)- scholarship in exchange for service.
- Public-Private Partnerships:
  - National Cybersecurity Workforce Development Agenda (NCWDA)- Collaboration between government, private sector, and educational institutions to develop/implement cyber workforce development strategies.
  - Technology Partnerships- Microsoft, Google, IBM, etc., partnering with government and educational institutions to provide training, certifications, etc., for cyber education.

# Human Resources and Cybersecurity Leaders Must Partner/Collaborate



## 01 Teaming

*Work with HR to share the nuances our cyber professionals seek and to design the opportunities that will attract, develop and ultimately retain them.*

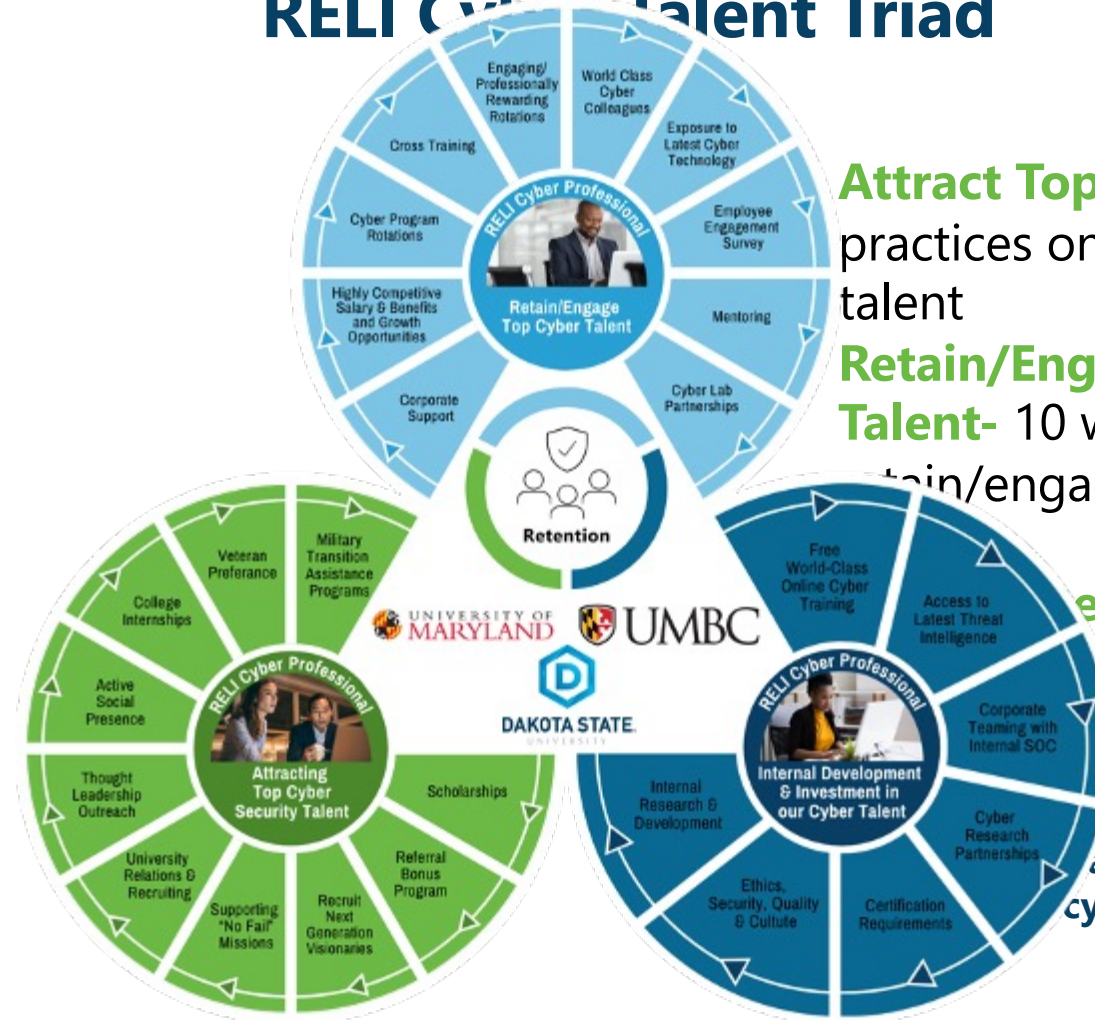
## 02 Communication

*Ensure all cyber professionals know the opportunities that are available to them. Reach out to them early and often. Be proactive.*

## 03 Relationships

*From mentoring to just listening, know your people and your cyber "community" to ensure your strategies are constantly evolving as the community needs evolve.*

# RELI Cyber Talent Triad



**Attract Top Talent- 10** practices on how to attract talent

**Retain/Engage Top Talent- 10 ways to** retain/engage to keep our

**Development- 7** develop our talent

**7 ways to focus your** attract, retain and cyber professionals

# Attract Top Cyber Talent



- The Mission
- Align recruiting practices with evolving cyber work expectations
- Go where available talent is
- Social Media is critical
- Engage Academia
- Offer Work-Life Balance
- Cyber professionals desire opportunities
- Enroll your cyber professionals

**RELI has hired over 250  
Co-Ops/Interns so far (58 cyber)**



# Develop/Invest in Top Cyber Talent



- DEI
- Offer Robust Career Pathways
- Continuous Learning and Professional Development
- Career Pathways and Advancement Opportunities
- Internal Research and Development
- Labs/Cyber Ranges (Hands-on)

**RELI offers over 3,000 Free Cybersecurity Courses**

# Retain/Engage Top Cyber Talent

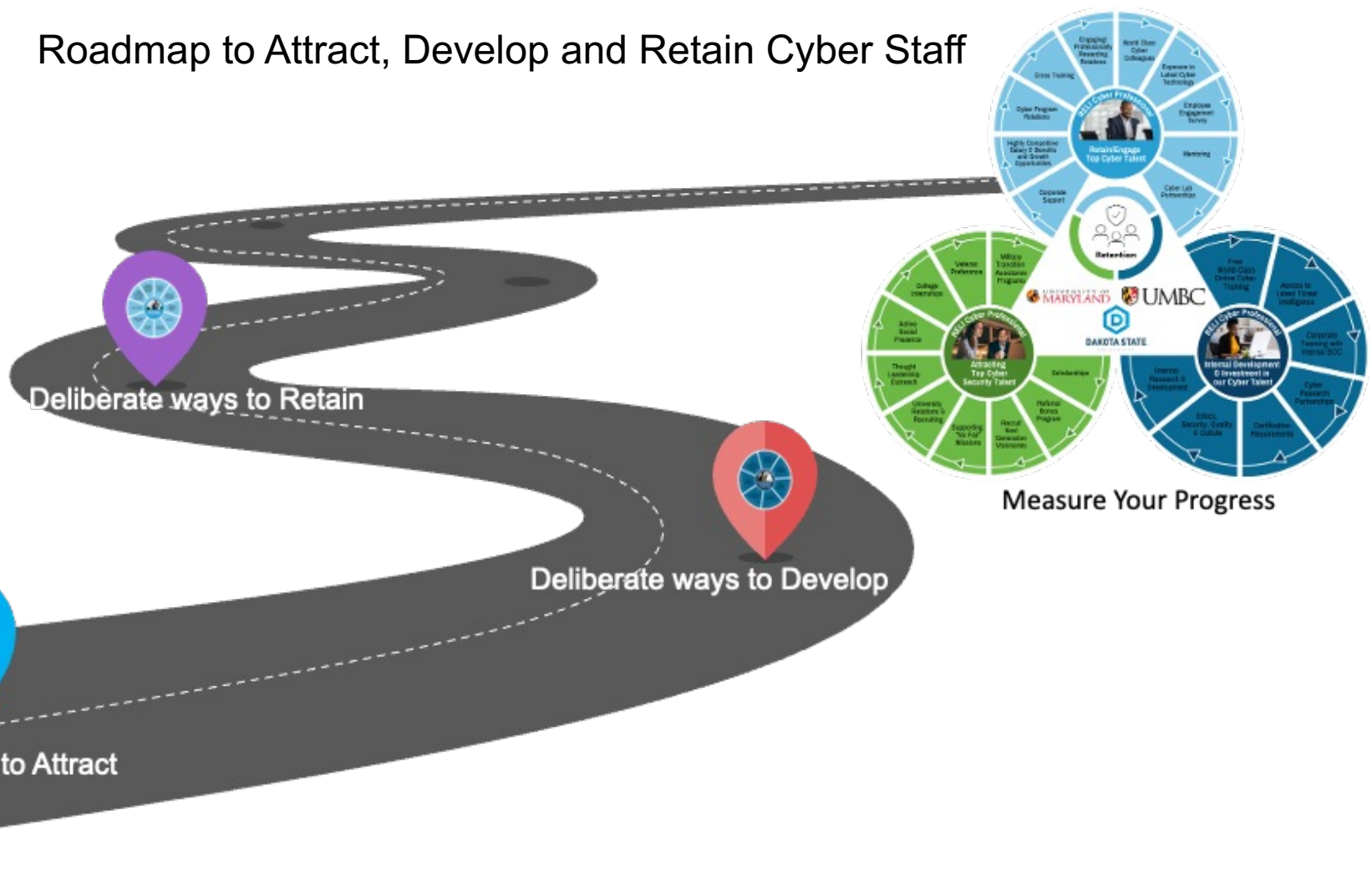
## Strategies for Consideration



- Partner Network
- Positive Culture
- Relevant Training
- Top Cyber Talent
- Cutting Edge Research
- Competitive Salary
- Employee Engagement Survey
- Growth Opportunities
- Engage your senior cyber leaders for mentoring
- Entrance/Exit Interviews
- Measure Retention Rates

**RELI's Cyber Professionals have Opportunities to be involved in the latest technology.**

# Roadmap to Attract, Develop and Retain Cyber Staff



## Summary

Filling the hundreds of thousands of cyber job vacancies across our nation is a national security imperative.

– President Biden (July 31, 2023)



## Questions