



NICE Community Coordinating Council Meeting Agenda

Date: March 24, 2021 Time: 3:30-5:00 p.m. ET

I. Introduction and Ground Rules - Susi Barraza, NICE Program Manager

II. Opening Remarks

- a. Industry Co-Chair - Jon Brickey, Senior Vice President, Mastercard
- b. Academic Co-Chair - Marni Baker-Stein, Chief Academic Officer and Provost, Western Governors University
- c. Government Co-Chair - Rodney Petersen, Director of NICE

III. Standing Items

a. Strategy Stories - New Developments that Align to NICE Strategic Plan

Howard Community College STEM Challenge Grant: A Response to Cybersecurity Workforce Demand in Central Maryland

Presented by Dr. Patrick Valdivia, Manager of Computing and Cyber Lab Services, Howard Community College, and Minah Woo, Associate Vice President, Continuing Education/Workforce Development, Howard Community College University

URL: <https://www.eda.gov/oie/stem/2020/>

b. Report Roundup - Learning from Good Ideas

Remote Work in the Capital Region

Presented by JB Holsten, CEO, Greater Washington Partnership

URL: <https://greaterwashingtonpartnership.com/publications/remote-work-in-the-capital-region/>

Howard Community College STEM Talent Challenge

HCC was recently awarded one of the inaugural [EDA STEM Talent Challenge](#) grants which seeks to increase placements in central Maryland in the following [NICE Framework Roles](#):

1. [Service Technical Support](#)
2. [Network Operations Specialist](#)
3. [Cyber Defense Analyst](#)
4. [Software Developer](#)

We have apprenticeship occupations in each of the above 4 roles. Additional placements will be made for Business Intelligence Analysts (non-cyber position).

As part of the grant, HCC is developing new programs in:

1. Cloud Operations and Security
2. Data Analytics

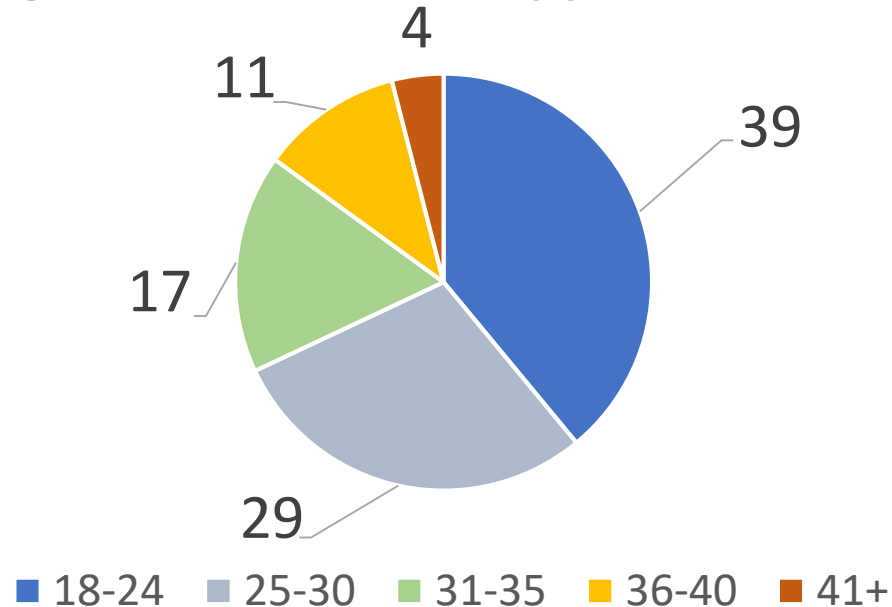
Modernizing Talent Management Through Apprenticeship

Since February 2020, HCC has partnered with a national company that has sponsored 49 IT Apprentices ([includes clearance with polygraph](#)) and 5 Software Development Apprentices ([uncleared](#))

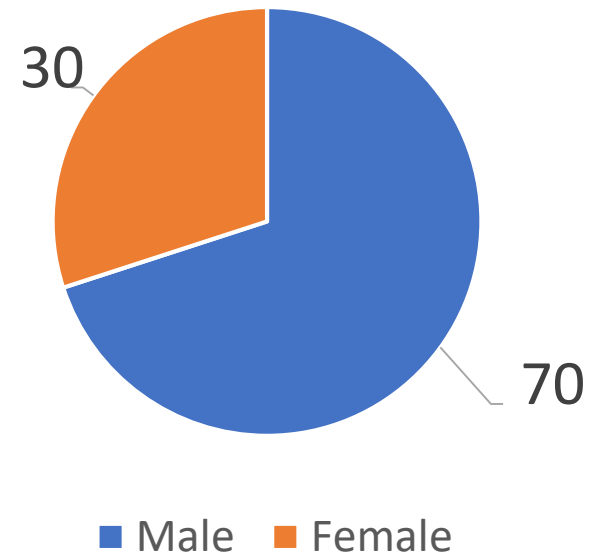
IT Apprenticeships include: A+, Net+, Sec+, CCNA

Software Apprenticeships include: various Microsoft Azure certs (dependent on occupation)

Age of IT/Software Apprentices (%)



Gender of IT/Software Apprentices (%)



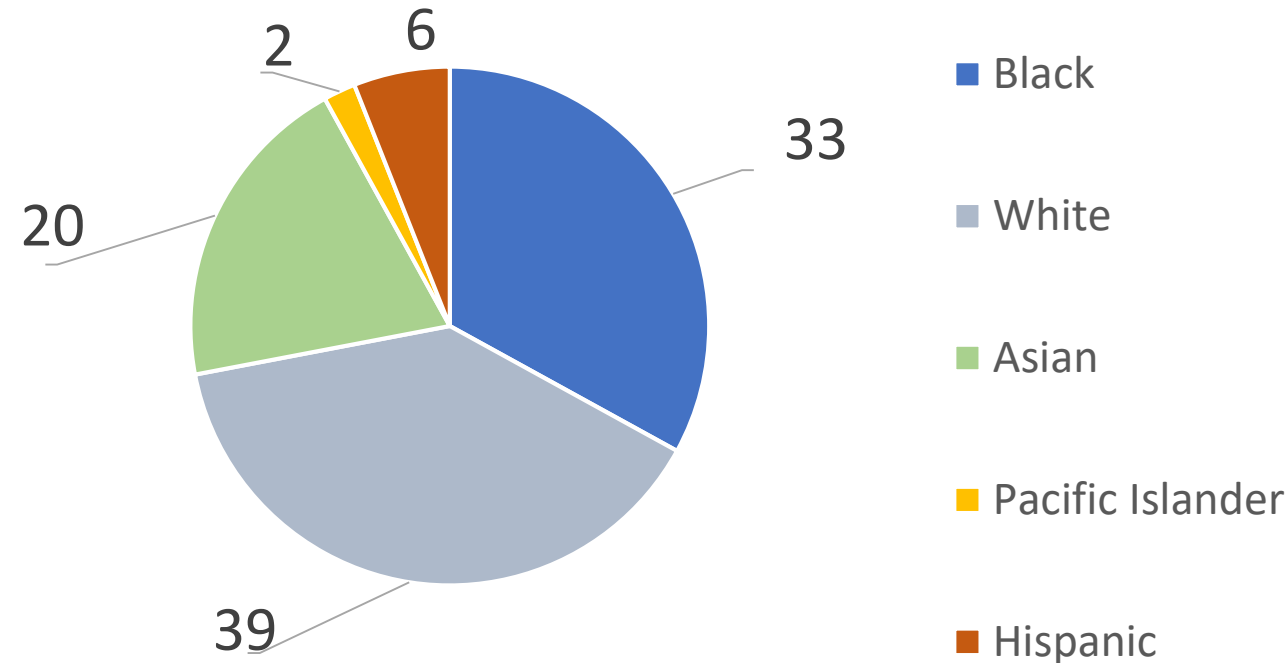
For program details, visit howardcc.edu/apprenticeship

Multiple Pathways/Diverse Workforce

Career History of IT Apprentices:

- Prior IT Experience
- Military
- Nursing
- Human Resources
- Accounting and finance
- Unemployed/underemployed

Race/Ethnicity of IT/Software Apprentices (%)



For more information, please contact: pvaldivia@howardcc.edu

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Remote Work in the Capital Region

J.B. Holston, CEO, Greater Washington Partnership

March 19, 2021



**GREATER WASHINGTON
PARTNERSHIP**

FROM BALTIMORE TO RICHMOND
FOSTERING UNITY
ADVANCING GROWTH



THE CAPITAL REGION FROM BALTIMORE TO RICHMOND

Our region has great diversity, tremendous assets, and immense potential. We have an intertwined economic future and our ability to thrive depends on the success of us all.

The super-region of Maryland, Virginia and the District – from Baltimore to Richmond – is the 3rd largest economy in the US and the 7th largest in the world.

The Partnership is uniquely positioned, with a broad coalition, to understand the gaps and identify goals across the Region, to track specific progress against those goals, and to catalyze solutions that benefit us all.



115

federal labs and
federally- funded
research and
development centers



46%

of the population 25
years+ hold
Bachelor's degree or
higher



184

languages
spoken; 175
international
embassies

FORTUNE
1000

53

Fortune 1000
companies
headquartered in
MD, DC, VA



4

significant
airports, two
major shipping
ports



OUR CURRENT INITIATIVES



SKILLS AND TALENT

Breaking the mold

Skills and Talent drives our ability to remain competitive and develop a sustainable pipeline.

We aim to make the Capital Region the most diverse digital tech workforce in the country by partnering with employers and educators to build industry-aligned digital tech pathways.



REGIONAL MOBILITY

Bending the curve

Regional mobility expands our options for employment and housing; it enables the connection of people, ideas, and innovation.

Our priorities are connecting the super region, improving the consumer experience, ensuring equitable access, and integrating innovation across jurisdictions.



INCLUSIVE GROWTH

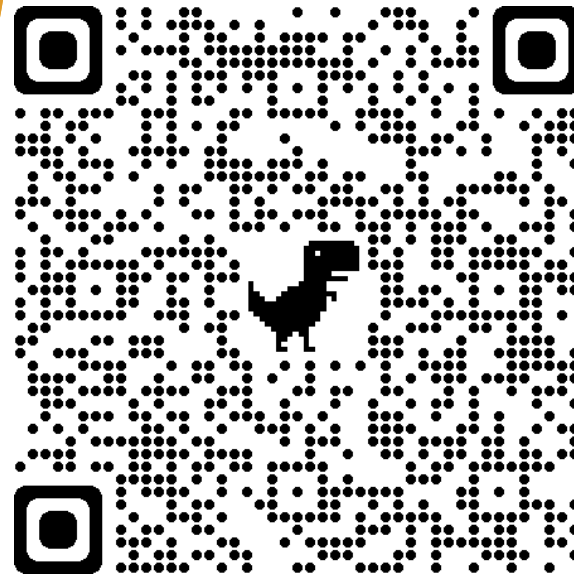
Changing the narrative

Inclusive Growth is the moral and economic imperative of our time.

Our pillars are empowering small and medium-sized businesses; supporting diverse innovation ecosystems; fostering better employment outcomes for Black and LatinX workforce; and addressing long-term systemic DEI organizational barriers.

Remote Work In The Capital Region Implications For The Region And An Inclusive Recovery

http://bit.ly/remotework_report



JB Holston

jholston@greaterwashingtonpartnership.com

THANK YOU



**GREATER WASHINGTON
PARTNERSHIP**

FROM BALTIMORE TO RICHMOND
FOSTERING UNITY
ADVANCING GROWTH

III. Standing Items

- c. Framework Feature - Applications and Uses of Workforce Framework for Cybersecurity

President's Cup Cybersecurity Competition

Presented by Michael Harpin, CISA

URL: <https://presidentcup.cisa.gov/>

- d. Research Review - Highlighting Research Results or Topics for Further Study

Securing a Nation: Improving Federal Cybersecurity Hiring in the United States

Presented by Will Markow, Managing Director, Human Capital Management and Emerging Technologies, Burning Glass Technologies

URL: <https://www.burning-glass.com/research-project/cybersecurity-securing-nation>



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PRESIDENT'S CUP
CYBERSECURITY COMPETITION

President's Cup Cybersecurity Competition

Implementing NICE Framework with Challenge Development



What is the President's Cup?

- Executive Order 13870 called for the establishment of the competition to identify and reward the best cybersecurity practitioners in the US Government executive workforce, strengthen our nation's cybersecurity talent, spread awareness of the cybersecurity profession and incentivize career in cyber defense.
 - Competition must relate to skills from NICE Framework.
- CISA has successfully created and run the President's Cup for the past two years.



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PRESIDENT'S CUP
CYBERSECURITY COMPETITION



How is the NICE Framework Used?

- The NICE Framework is integrated in the initial stages of planning and development for the competition to ensure a well-rounded competition and that challenges relate to real-world scenarios.
 - Shift in team dynamics between 2019 and 2020 to better match NICE Framework.
- The NICE Framework will be used as the focal point for future challenge development.



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PRESIDENT'S CUP
CYBERSECURITY COMPETITION



President's Cup 2019

- Two Tracks – Teams and Individuals
- Challenges mapped to categories from EO 13870 and NICE Framework.
- Leveraging NICE Framework categories led to successful competition but using lower levels could target specialized skill sets.

Teams Round 1 Gameboard

ANALYZE AND INVESTIGATE	COLLECT AND OPERATE	OPERATE AND MAINTAIN	PROTECT AND DEFEND	SECURELY PROVISION
250	250	250	250	250
500	500	500	500	500
1000	1000	1000	1000	1000

Little Compromise

Category: Analyze and Investigate

Difficulty Level: 250

Executive Order Category: Big Data Analysis



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PRESIDENT'S CUP
CYBERSECURITY COMPETITION



President's Cup 2020

- NICE Framework work-role based.
 - Two separate individual tracks.
- Work Roles for competition were determined based on experience and insights from PresCup Team
- Work Roles and Tasks identified in gameboard

1000

START

Packet Ninjitsu

demo pcap

Gather information from a network packet capture file (pcap).

NICE Work Role:

Cyber Defense Analyst

NICE Tasks:

- T0023 - Characterize and analyze network traffic to identify anomalous activity and potential threats to network resources.

Individual Track A

Incident Response/Forensics

Individual Track B

Exploitation/Vuln Assessment



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PRESIDENT'S CUP
CYBERSECURITY COMPETITION



Future Considerations for President's Cup and NICE Framework

- Continued use and promotion of NICE Framework within President's Cup.
- Explore employment trends in work roles, tasks, and competencies.
 - Identifying additional areas of NICE Framework to incorporate in order to address all aspects of cybersecurity.
- Examine ways to leverage NICE Framework to target competitions towards personnel interested in or starting a cyber career.



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PRESIDENT'S CUP
CYBERSECURITY COMPETITION





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PRESIDENT'S CUP

CYBERSECURITY COMPETITION

Michael Harpin
michael.harpin@cisa.dhs.gov

FOR MORE INFORMATION: [CISA.GOV](https://www.cisa.gov)





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SECURING A NATION

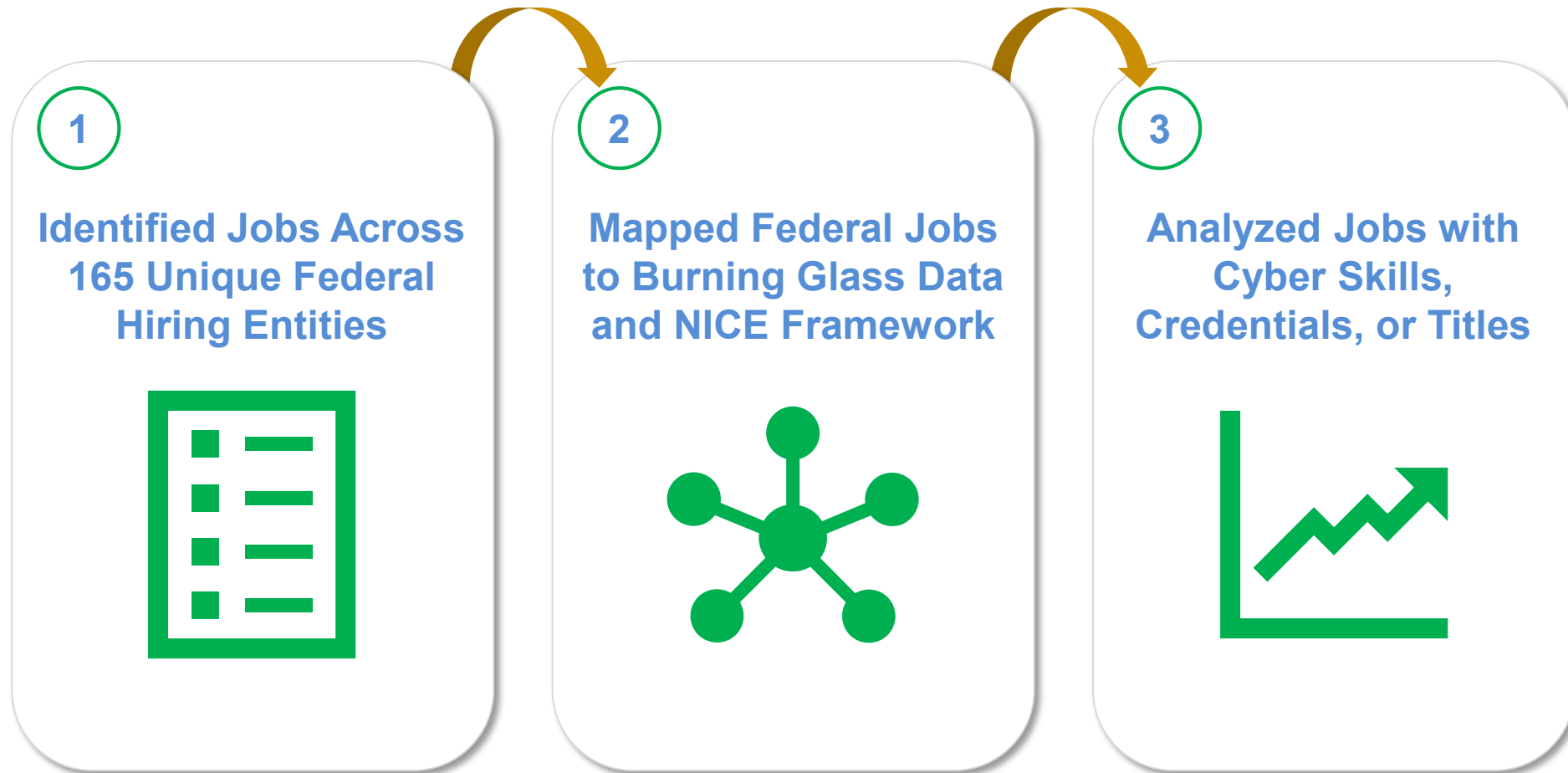
IMPROVING FEDERAL CYBERSECURITY HIRING IN THE UNITED STATES



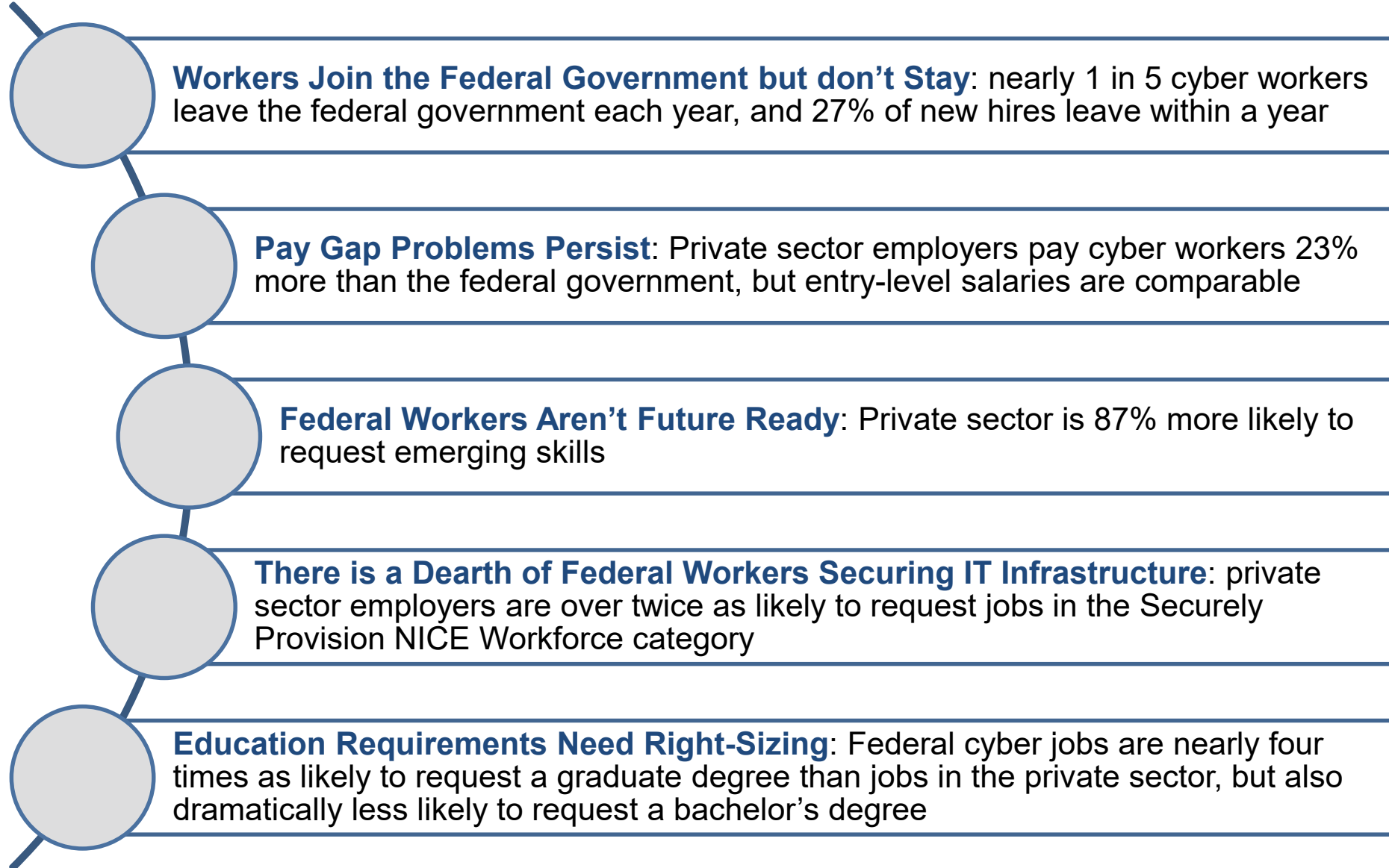
- The federal government is the largest U.S. employer of cybersecurity workers, but federal hiring is fragmented
- Public data on the overall federal cybersecurity workforce is limited, hindering attempts to enhance workforce development efforts
- *Securing a Nation* aims to quantify the federal cybersecurity workforce and make data-driven recommendations for enhancing federal cybersecurity hiring

QUANTIFYING THE FEDERAL CYBERSECURITY WORKFORCE

OUR APPROACH



WHAT DID WE LEARN ABOUT THE FEDERAL CYBERSECURITY WORKFORCE?



HOW CAN THE FEDERAL GOVERNMENT IMPROVE ITS CYBERSECURITY WORKFORCE?



THANK YOU!



Where to Access the Report:

<https://www.burning-glass.com/research-project/cybersecurity-securing-nation/>

For More Information Contact:

Will Markow

Managing Director

wmarkow@burning-glass.com

burning-glass.com

617-227-4800

IV. Working Group Updates

a. Promote Career Discovery

James “Jimmy” Baker, Cybersecurity Evangelist and Author; or Roland Varriale II, Cybersecurity Analyst, Argonne National Laboratory

b. Transform Learning Process

Dr. Aurelia T. Williams, Interim Vice Provost for Academic Administration, Norfolk State University; or Richard Spires, Instructor, Learning Tree

c. Modernize Talent Management

Karen Jensen, Saaby Consulting; or Kevin Perry, Chief Cyber Training, DoD Cyber Crime Center/Cyber Training Academy; or Melissa Woo, Executive Vice President for Administration, Michigan State University

V. Community of Interest Updates

a. Apprenticeships in Cybersecurity

Tony Bryan, Executive Director, CyberUp; or Jennifer Oddo Executive Director, Strategic Workforce Education and Innovation, Youngstown State University

b. Cybersecurity Skills Competitions

Amelia Phillips, Highline College; or Brad Wolfenden, EmberSec

c. K12 Cybersecurity Educators

Terrance Campbell, CTE Cybersecurity Teacher, Shelby County Schools; or Laurin Buchanan, Secure Decisions

d. NICE Framework Users

Karen Wetzel, Manager of the NICE Framework

VI. Project Progress Reports

a. NICE Conference and Expo

Presenter: Randy Pestana, Florida International University

URL: <https://niceconference.org/>

b. NICE K12 Cybersecurity Education Conference

Presenter: Felicia Rateliff, Director of Operations & Programs, iKeepSafe

URL: <https://www.k12cybersecurityconference.org/>

c. Centers of Academic Excellence (CAE) in Cybersecurity Community

Presenter: Amy Hysell, Cybersecurity Center, California State University, San Bernardino

URL: <https://www.caecommunity.org/>

SAVE THE DATE

2021 • VIRTUAL
NICE K12
CYBERSECURITY EDUCATION
CONFERENCE

DECEMBER 6-7, 2021

k12cybersecurityconference.org

THE CONFERENCE FOR K12 CYBER EDUCATORS

#NICEK12

2021 • VIRTUAL

NICE K12

**CYBERSECURITY EDUCATION
CONFERENCE**

DEC 6-7, 2021



CALL FOR SPEAKER PROPOSALS

SUBMISSIONS OPEN APRIL 13, 2021

SUBMISSION DEADLINE JUNE 18, 2021

k12cybersecurityconference.org

KEY DATES

2021 • VIRTUAL
NICE K12
CYBERSECURITY EDUCATION
CONFERENCE

- THURSDAY, MARCH 25 - FIRST PLANNING COMMITTEE MEETING
- APRIL 13 – CALL FOR SPEAKER PROPOSALS OPENS
- JUNE 18 – CALL FOR SPEAKER PROPOSALS CLOSES
- MID AUGUST – EARLY-BIRD REGISTRATION OPENS, AGENDA GOES LIVE
- LATE OCTOBER – EARLY-BIRD REGISTRATION CLOSES
- DECEMBER 4-5 – PRE-CONFERENCE WORKSHOPS

SPONSOR & EXHIBIT

2021 • VIRTUAL
NICE K12
CYBERSECURITY EDUCATION
CONFERENCE

Sponsor Level & Benefits	TERABYTE \$5000 (3 available)	GIGABYTE \$3500 (10 available)	MEGABYTE \$2000 (20 available)	GENERAL \$1000 (unlimited)
Complimentary registrations	✓ (6)	✓ (4)	✓ (3)	✓ (2)
Logo on website and app sponsor pages	✓	✓	✓	✓
Complimentary Exhibitor Showcase virtual table on Whova conference platform	✓	✓	✓	✓
Email list of opt-in conference attendees	✓	✓	✓	
Logo on pre-conference email blasts & social media	✓	✓		
Ability to add items to virtual attendee goodie bag	✓	✓	✓	✓
Branded Track & Zoom room (Example: "Track 2, Sponsored by MasterCard")	✓			

YEAR-ROUND MISSION SPONSOR



EXHIBITOR VIRTUAL BOOTH:

\$750 – For-Profit Companies

\$500 – Non-Profit Orgs

Email conference@ikeepsafe for more info

QUESTIONS/IDEAS

2021 • VIRTUAL
NICE K12
CYBERSECURITY EDUCATION
CONFERENCE

FOR QUESTIONS, COMMENTS, IDEAS..

CONTACT FELICIA RATELIFF

conference@ikeepsafe.org

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VII. Featured Topic

INFOSEC Institute Study on NICE Framework

Megan Sawle, Vice President, Marketing, INFOSEC Institute

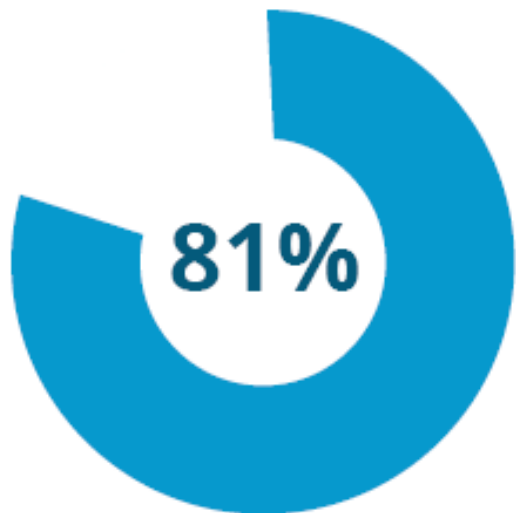
INFOSEC

2021 Cybersecurity Role & Career Path Clarity Study

Using the NICE Workforce Framework
for Cybersecurity to recruit talent &
upskill teams



Research says: Workforce frameworks work



81% of orgs are at least considering aligning job descriptions to NICE



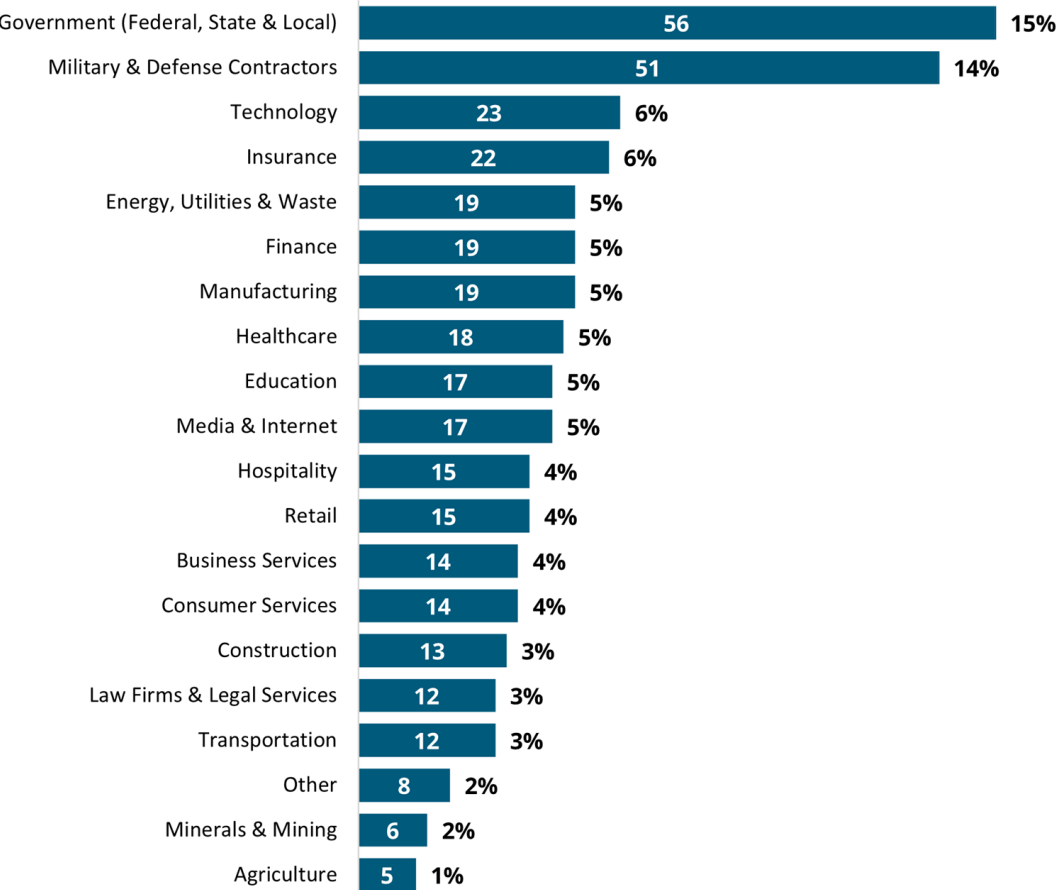
They were also 676% more likely to report well-defined cybersecurity roles



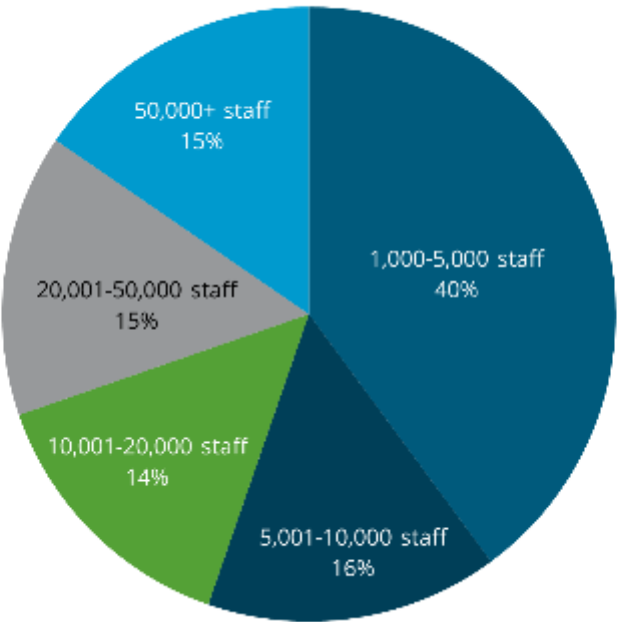
And 57% more satisfied with their ability to fill open cybersecurity roles

Survey methodology

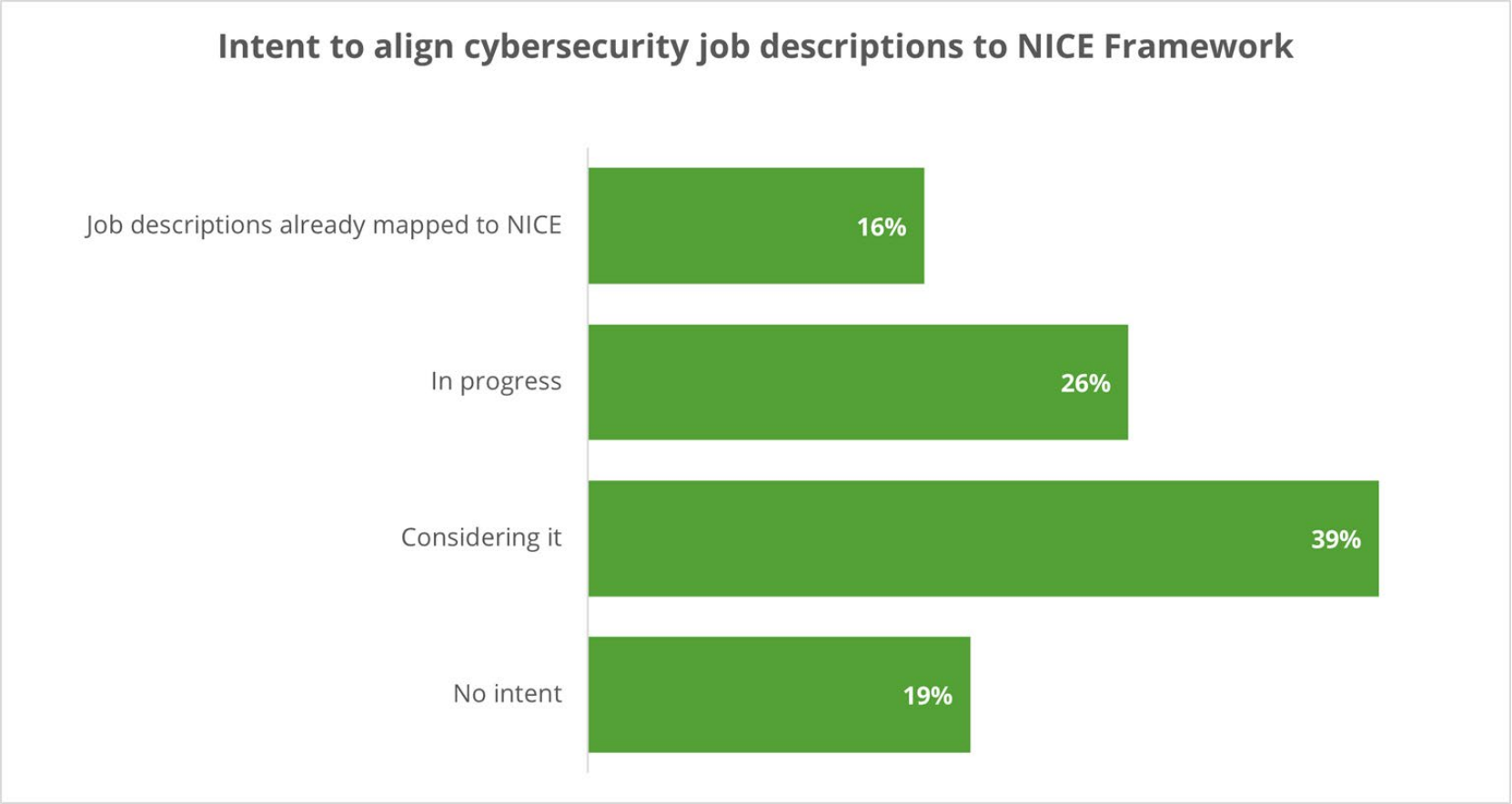
Industry participation



Organization size

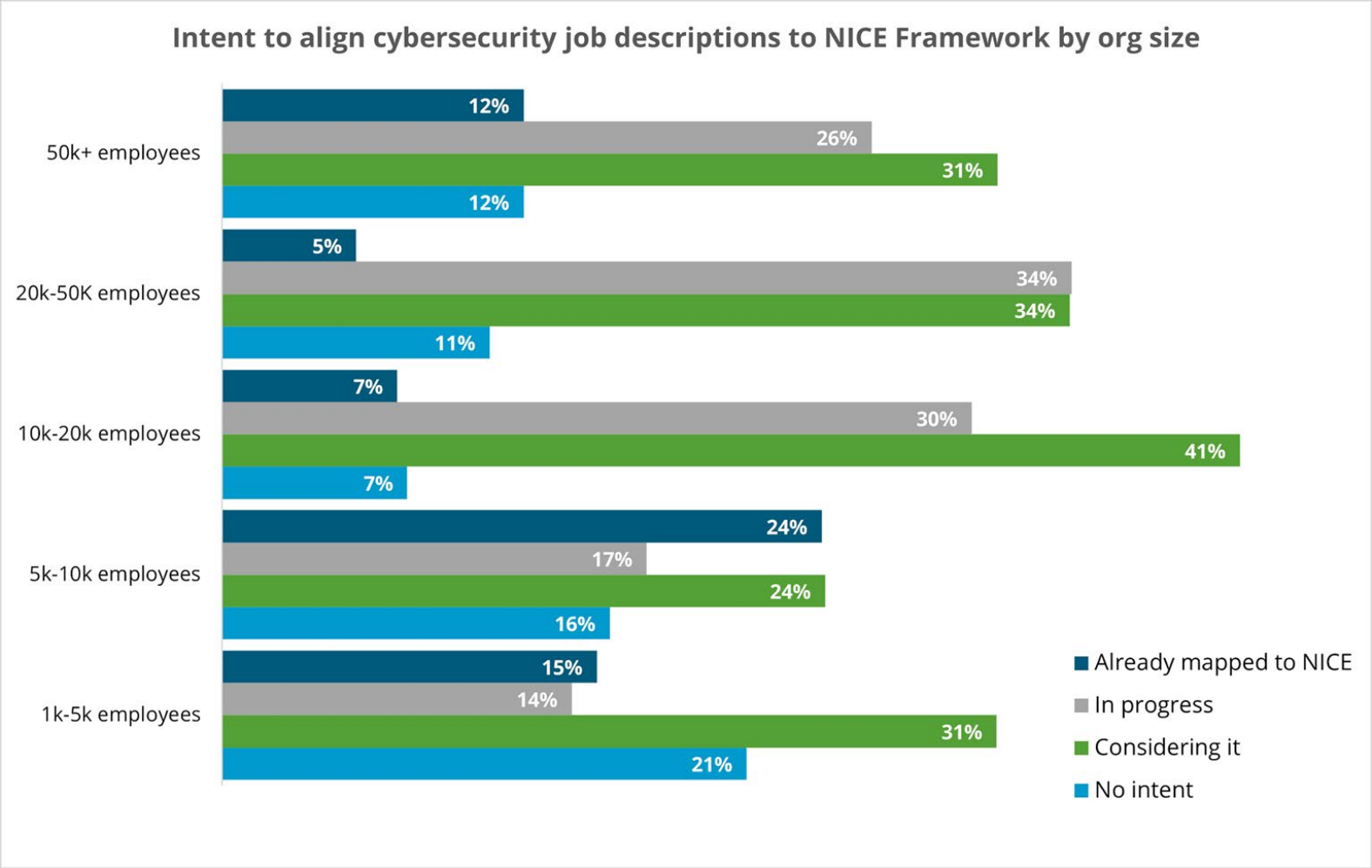


81% of orgs at least considering mapping job descriptions to NICE

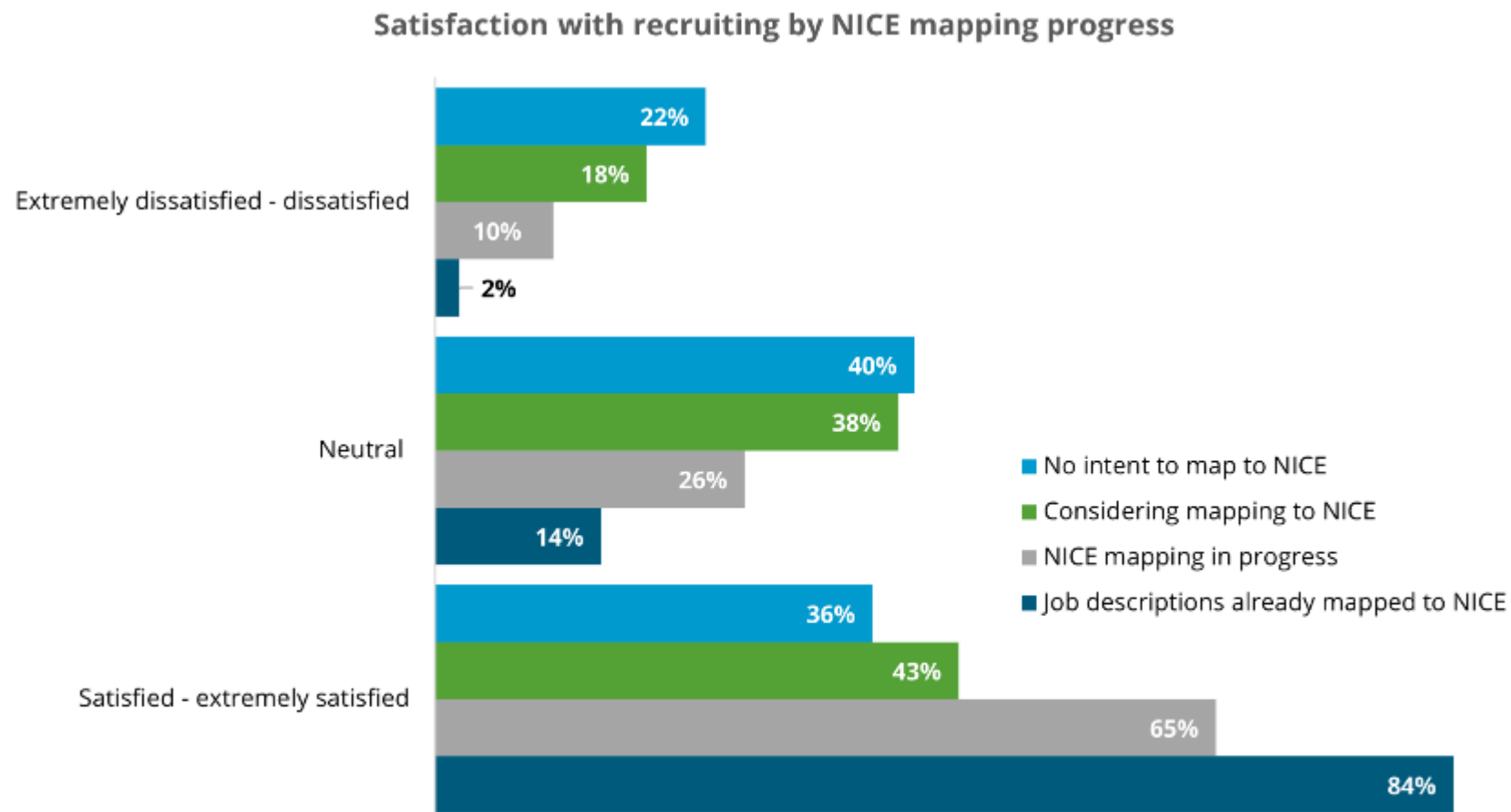


N = 311; Data excludes those who reported no familiarity with NICE

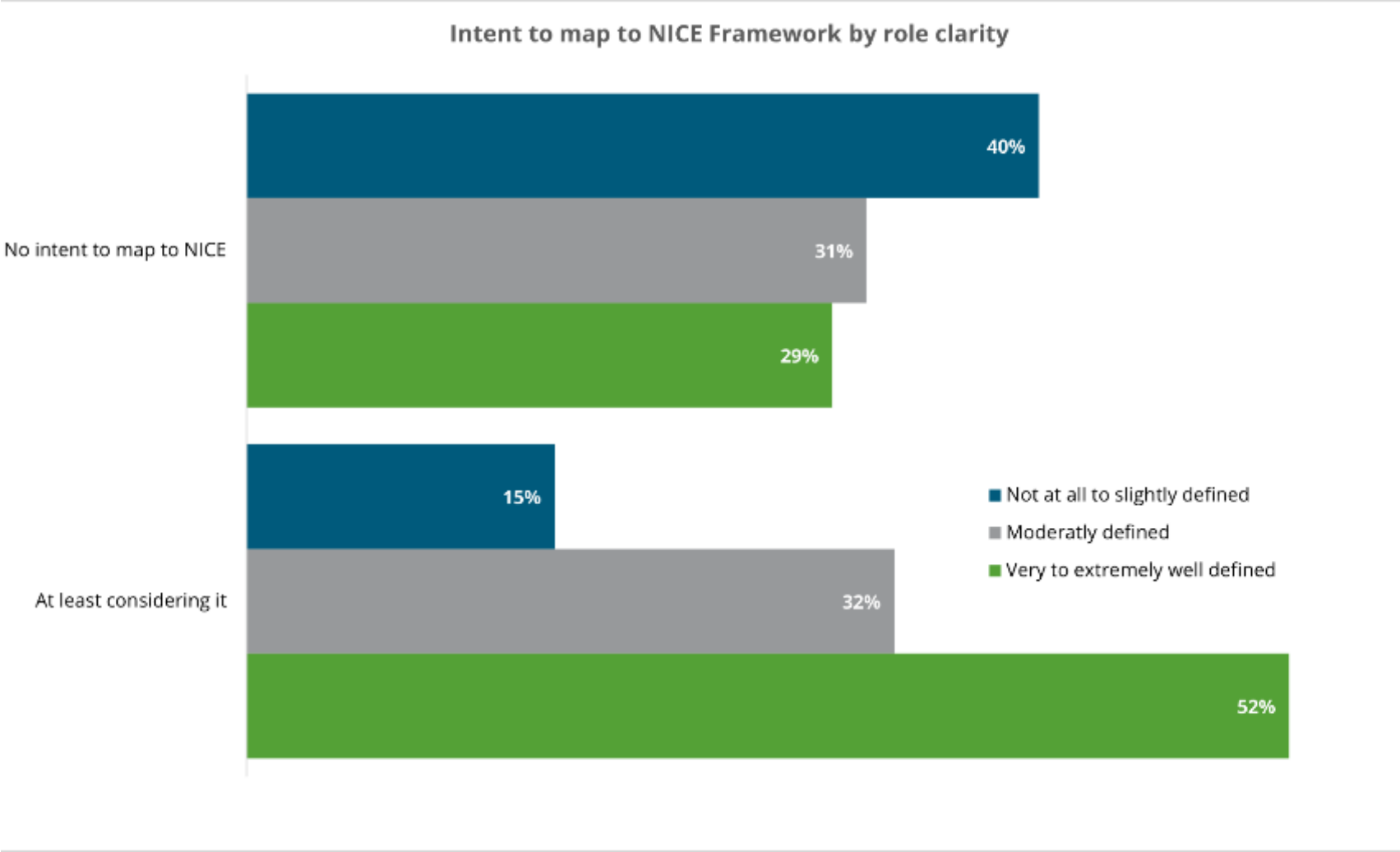
Interest spans all organization sizes



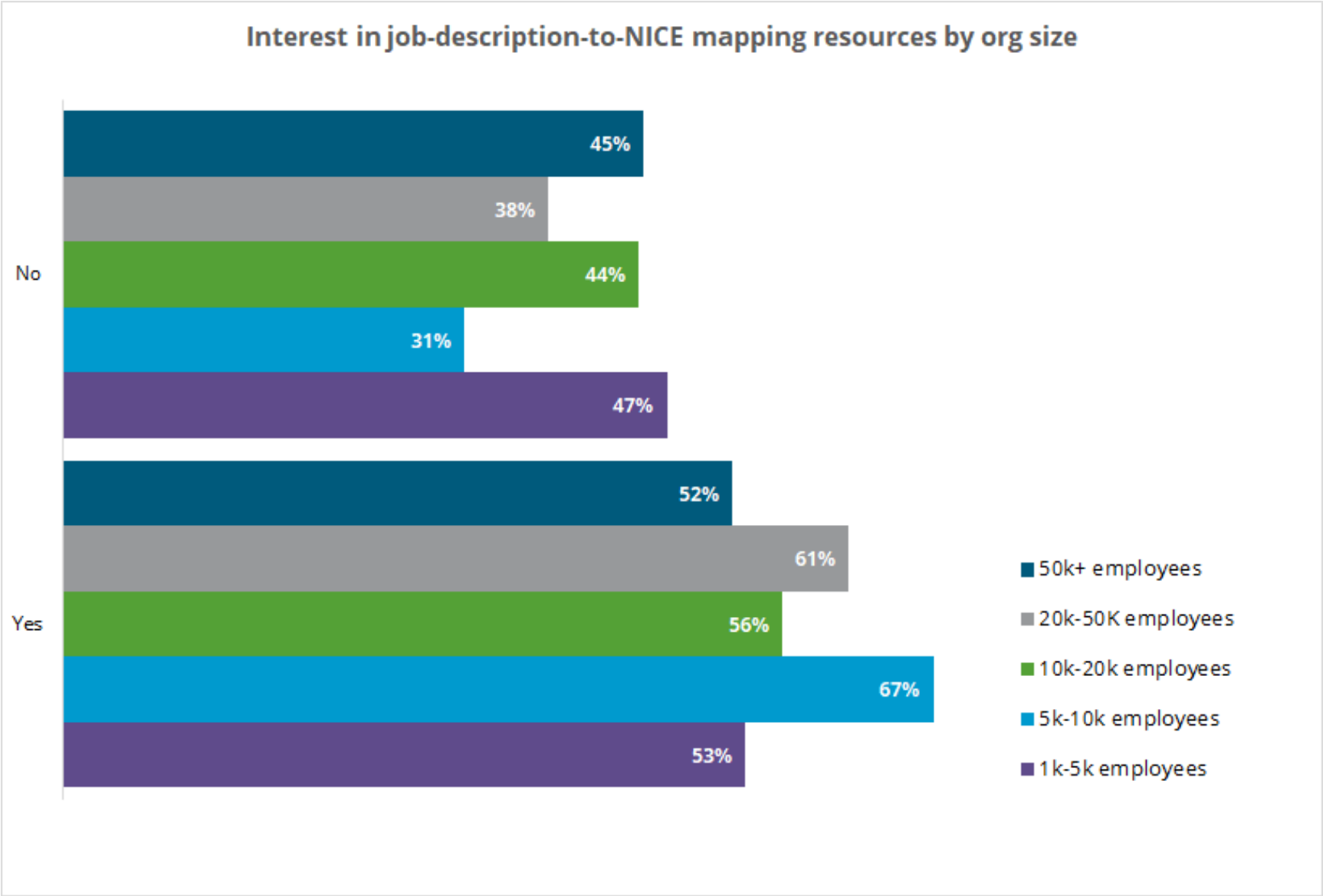
And it's working.
Very well.



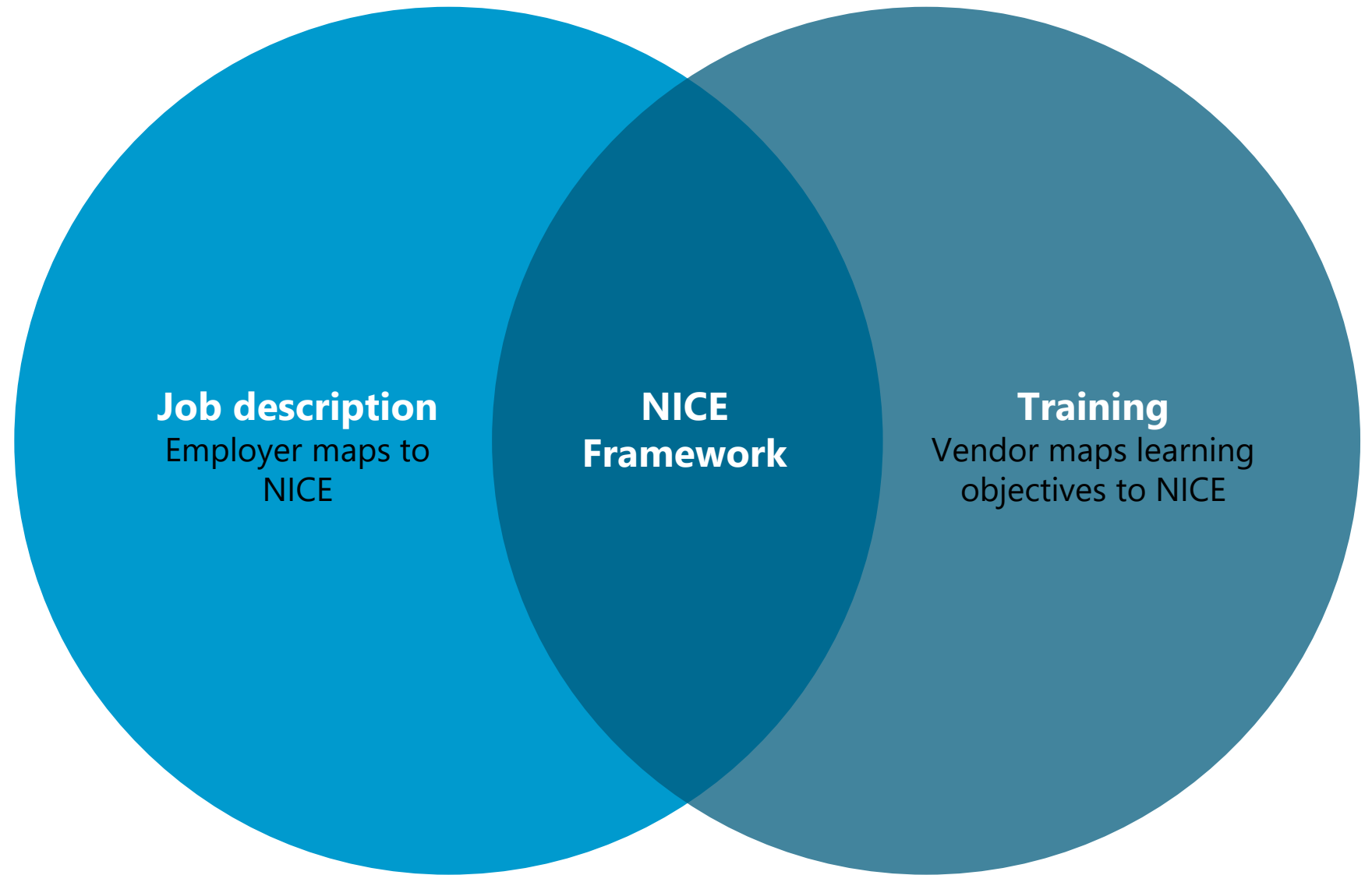
Likely due to improved role clarity



Orgs of all sizes
want help scaling
NICE mapping
efforts



Bringing it all together



Outcome: Role-based employee dev plan

Cyber Defense Incident Responder (PR-CIR-001)			
Course name	Knowledge Statement	Skill Statement	Example Knowledge & Skill Statements
Cisco Certified CyberOps Associate	K0058, K0332, K0565 (plus 7 more)	S0173	K0058: Knowledge of network traffic analysis methods S0173: Skill in using security event correlation tools
CERT-Certified Computer Security Incident Handler	K0161, K0177, K0179 (plus 10 more)	S0365, S0173	K0161: Knowledge of different classes of attacks (e.g., passive, active, insider, close-in, distribution attacks) S0365: Skill to design incident response for cloud service models
Incident Response Fundamentals	K0042, K0106, K0287 (plus 9 more)	S0003	K0106: Knowledge of incident response and handling methodologies. S0003: Skill of identifying, capturing, containing and reporting malware

Partial mapping for demonstration only.

Let's work together!



Megan Sawle

VP Marketing, Infosec

megan.sawle@infosecinsitute.com

 linkedin.com/in/megan-sawle/

VII. Closing Remarks and Next Meeting Reminder

Next NICE Community Meeting: Wednesday, April 28, 2021 at 3:30 p.m. ET