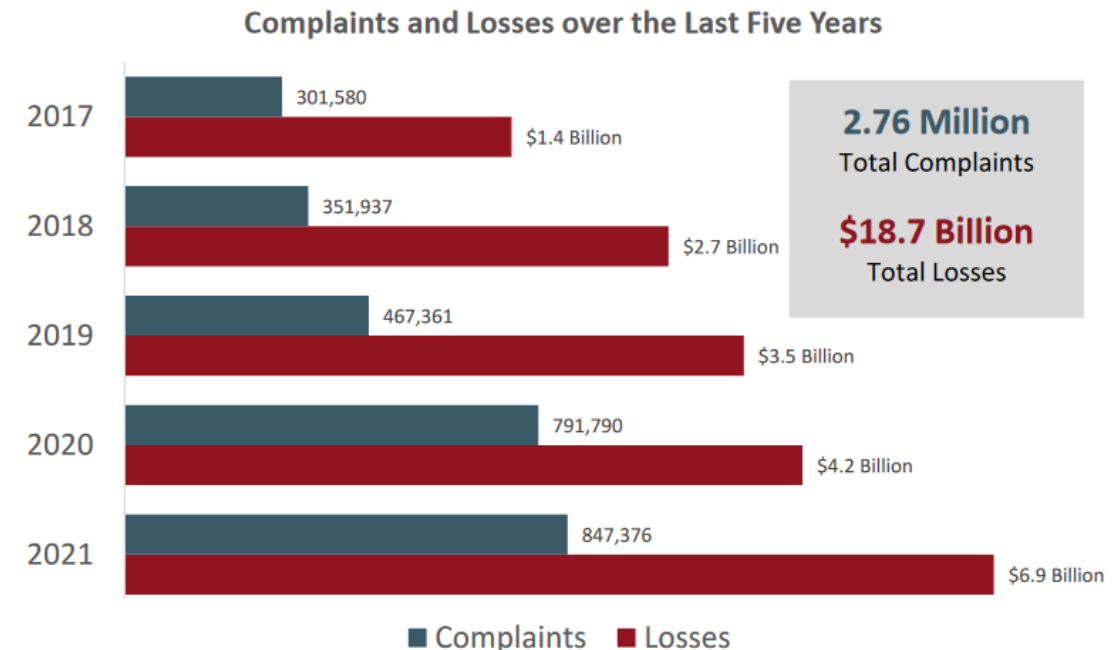


Technology Transition Project: Cyber Secure Dashboard

Glen Salo
Heartland Science and Technology Group

The Problem

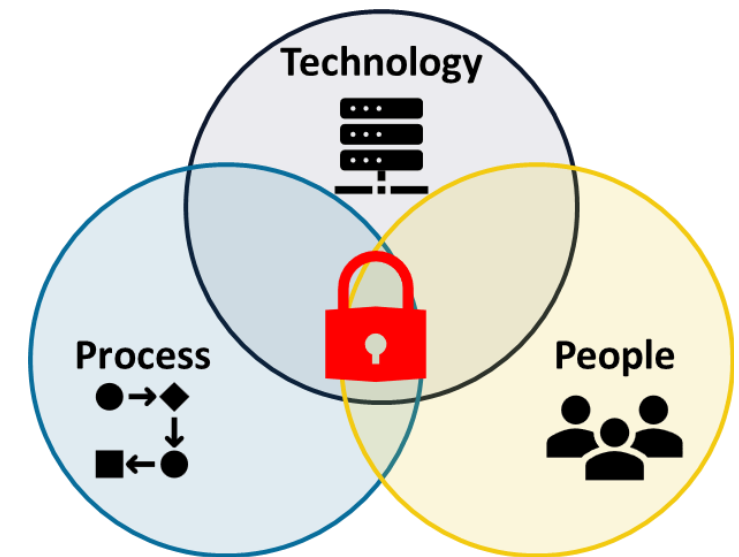
- The prevailing cyber risk management processes (in government and the private sector) are inconsistent, opaque, and insufficient
- The prevailing practices...
 - Impede our progress towards enhancing the security and resilience of our critical infrastructure
 - Lead to continued year-over-year financial losses
 - Are inadequate to address national security threats by nation-state actors



Federal Bureau of Investigation Internet Crime Report 2021

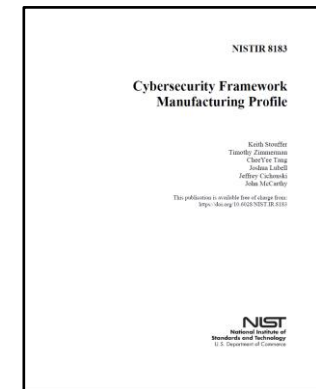
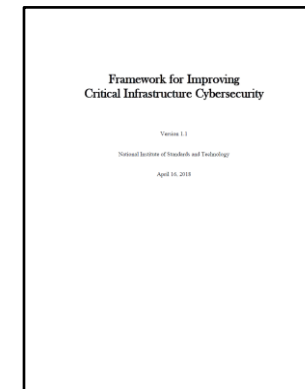
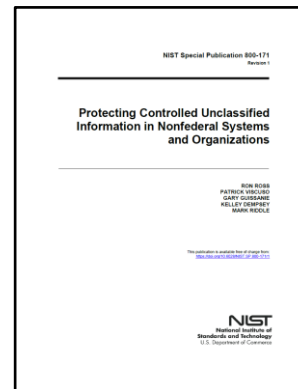
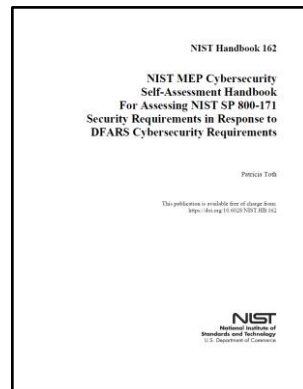
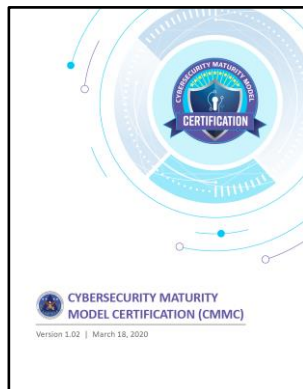
The Solution

- Technology solutions are necessary but insufficient
- Increased emphasis on people and process is required
- **Solution:** A standards-based assessment, monitoring, management, and reporting tool
- DHS Components: CISA, TSA, USCG



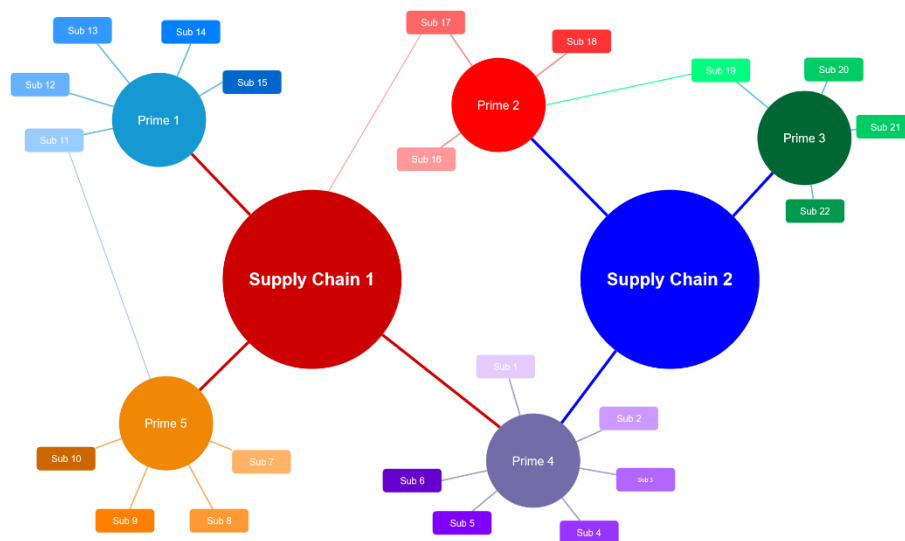
What Will Success Look Like?

- Owners and operators of critical infrastructure will adopt and conform to national **cybersecurity standards**, processes, and best practices
 - DHS (CISA) Cyber Security Performance Goals, NIST CSF, the DoD CMMC, ...
- **Standardized assessment methodologies** will measure conformance
 - NIST SP 800-171A, NIST SP 800-53A, NIST 162 Handbook, etc.



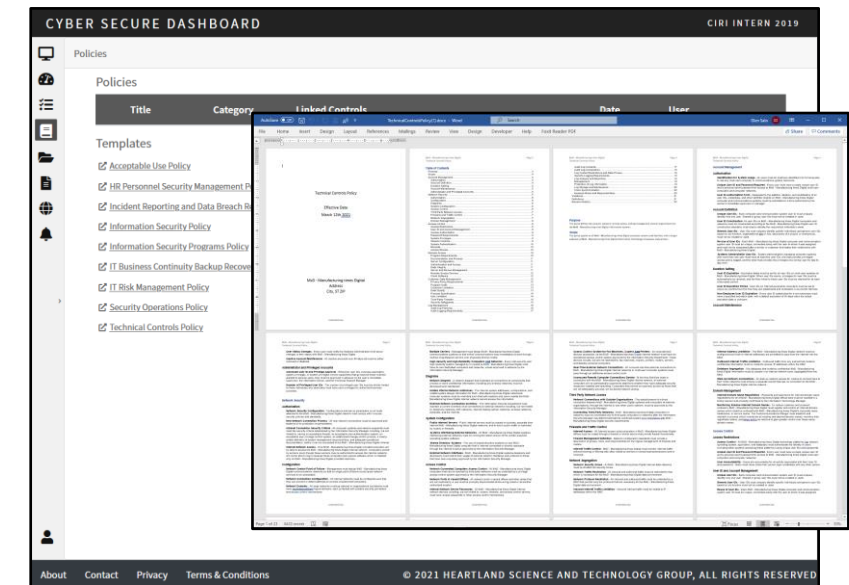
What Will Success Look Like (cont'd)?

- Conformance will be measured for individual organization and entire supply chains
- Continuous improvement will be facilitated, monitored, reported



Benefits (to the user)

- Eases, accelerates, **lowers cost** of conformance to national standards
- **Operationalizes** standardized cyber management processes/practices
- **Harmonizes** internal and external (out-sourced) cybersecurity activities
- **Continuous visibility** of progress toward target posture
- Eases internal/external **stakeholder reporting**
- Supports individual organization and extended **supply chains**



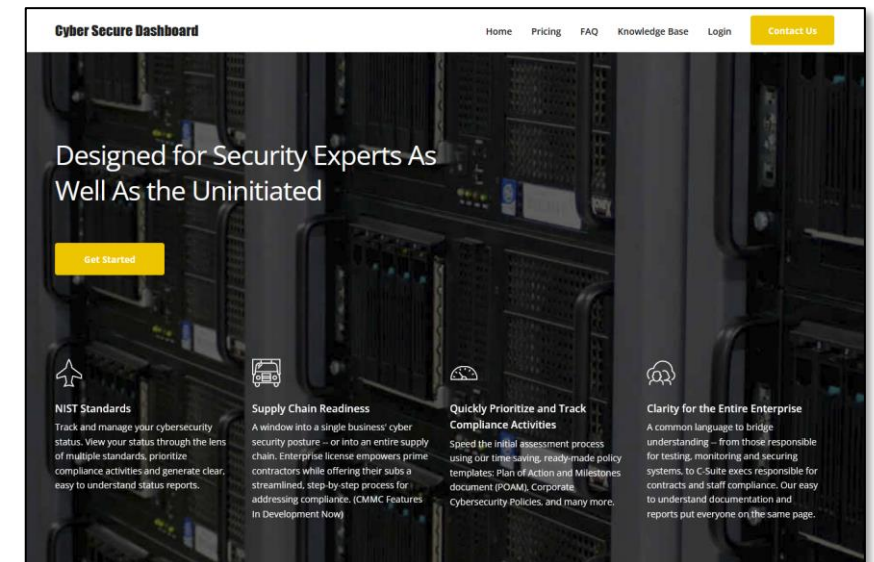
Benefits (to homeland security enterprise)

- Facilitates **broad-scale adoption** of national standards & best practices
- Provides **common metrics/criteria** for assessing & reporting progress
- Provides a **common language/lexicon** for all stakeholders
- Facilitates **sound governance** and **policy** implementation
- Facilitates “ripple effect” as standards are enhanced/updated
- **Enhances the security and resilience** of our critical infrastructure



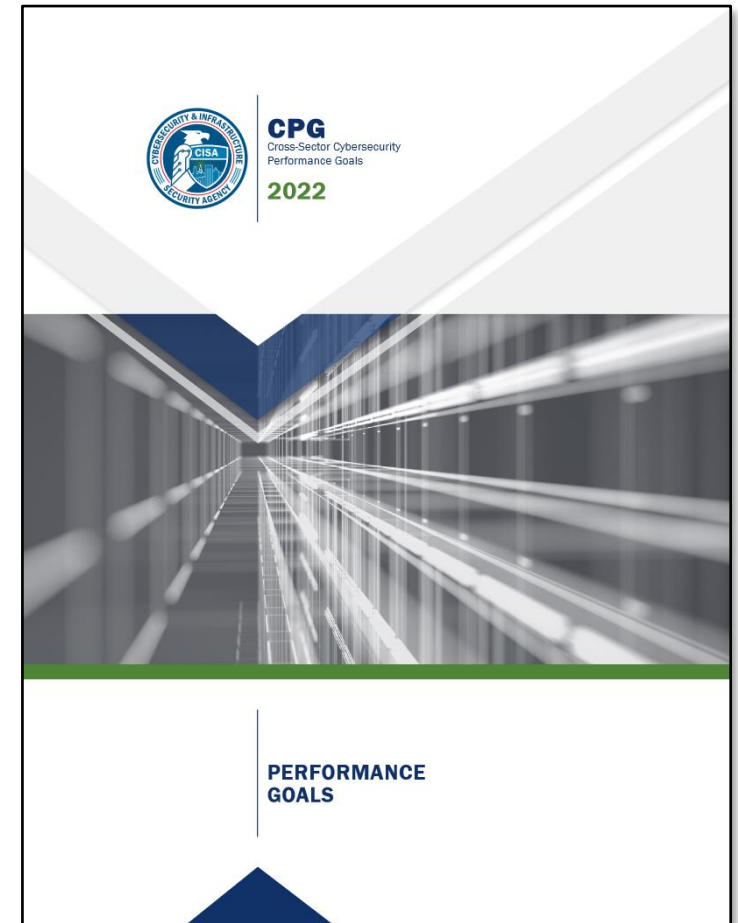
Accomplishments

- Software developed, tested, and available as a **SaaS offering**
 - Learn-by-doing, policies, standards-based assessment, monitoring
 - Plan of Action & Milestones (cybersecurity task management/harmonization)
 - Provides a pathway for continuous improvement and progress reporting
- Six cybersecurity standards
 - NIST CSF, MP, RBO, PSAP, CMMC, 171
- Four standards-based assessment methodologies
 - 171A, 53/53A, 162 Handbook
- Supply chain status aggregation/visibility



Activities Remaining

- Integrate with Cyber Talent Bridge
 - NIST NICE-based workforce management
 - Alignment of knowledge/skills to cybersecurity task assignment
 - Identify & mitigate skills and/or training gaps
- Integrate DHS CISA CPG
- Integrate Trustmark framework (federated ICAM)
 - Emergency response, law enforcement, other sensitive communities
- Deploy with government approved containers
- Integrate education and training



Annual Review: CyberTalent Bridge

Anderson Wiese

2wav

The Problem

What capabilities do I need?



Cynthia Jefferson
Incoming CISO
SME Manufacturing

Who in my talent pool
has these capabilities?

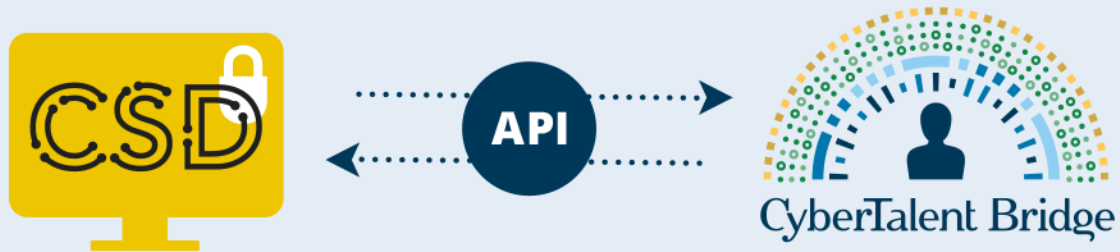


What missing
skills do I need to
develop or recruit?



What will success look like?

Cybersecurity teams use CTB with CSD to manage compliance and workforce development.



CyberTalent Passports share skills-based capability statements.



▼ JOB POSITIONS

Information System Architect | A |
February 2021–present
Mega Internet Company

▼ CERTIFICATIONS

Certified Information Systems Security Professional (CISSP) | A |
January 2020

▶ WORK ROLES

▶ COMPETENCIES

▶ COURSES

▶ EXPERIENCES

▶ RECOMMENDATIONS

Benefits

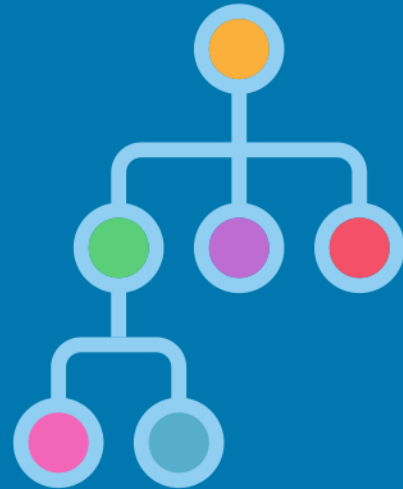
Tasking

Requirements to
recommendations



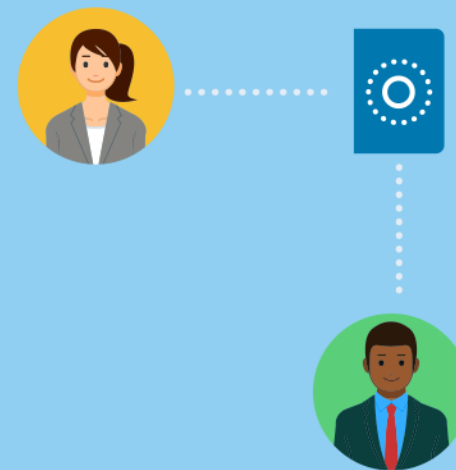
Workforce

Assessment,
development,
recruiting



Sharable Passports

Encourage
cooperation and
integration



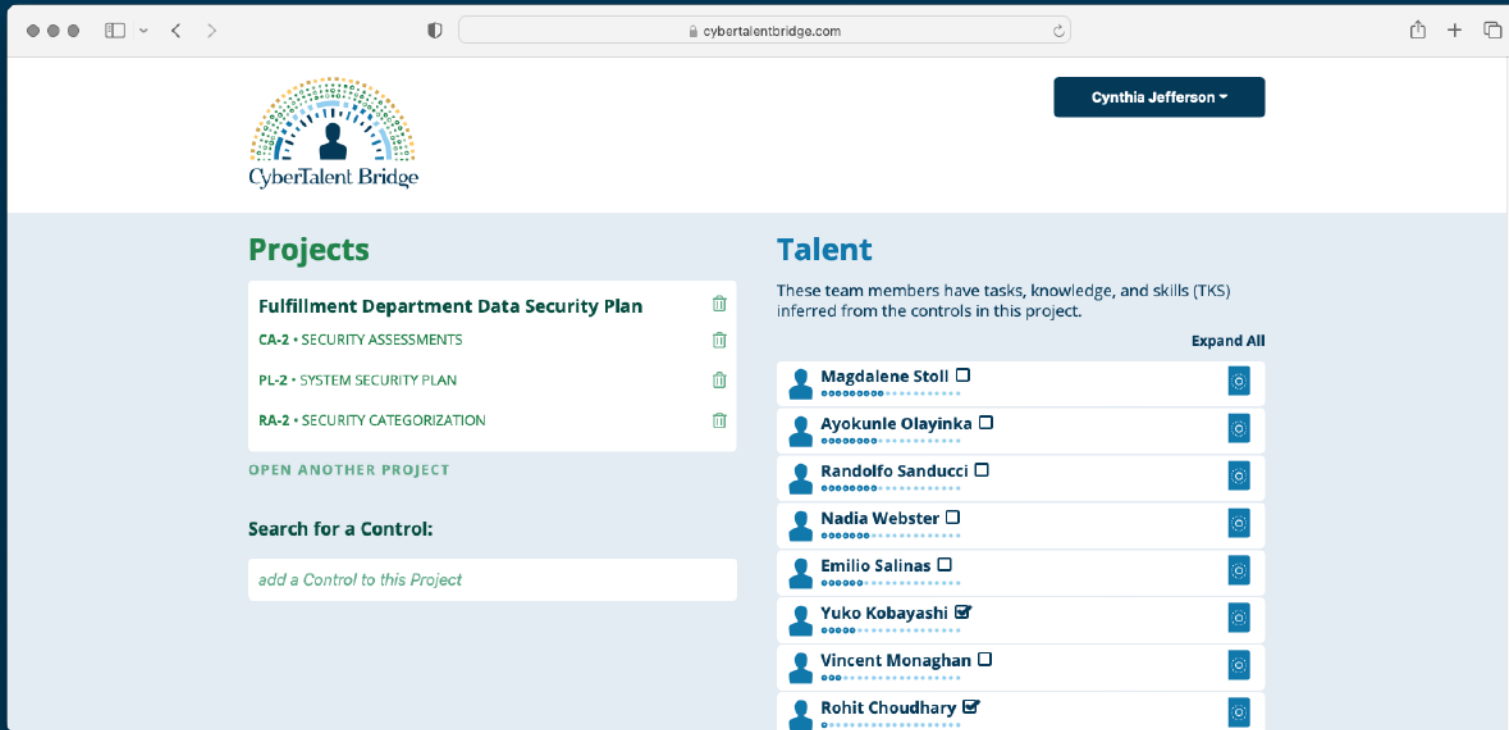
Frameworks

Connect
cybersecurity
frameworks



Accomplishments

CyberTalent Bridge works!



CTB is the first workforce tool engineered from the ground up in terms of the NICE Framework.

Bridges between isolated frameworks.

Realizes portable, sharable CyberTalent Passports

Evaluates talent capability by inference and confidence.

Activities Remaining

Commercial release
integrated with
Cyber Secure
Dashboard.



CyberTalent
Passport public
release.



Optimize for scale.



Enhancements for
potential industry
partners:

Training agencies,
community colleges,
universities

Recruiters

Insurers

