

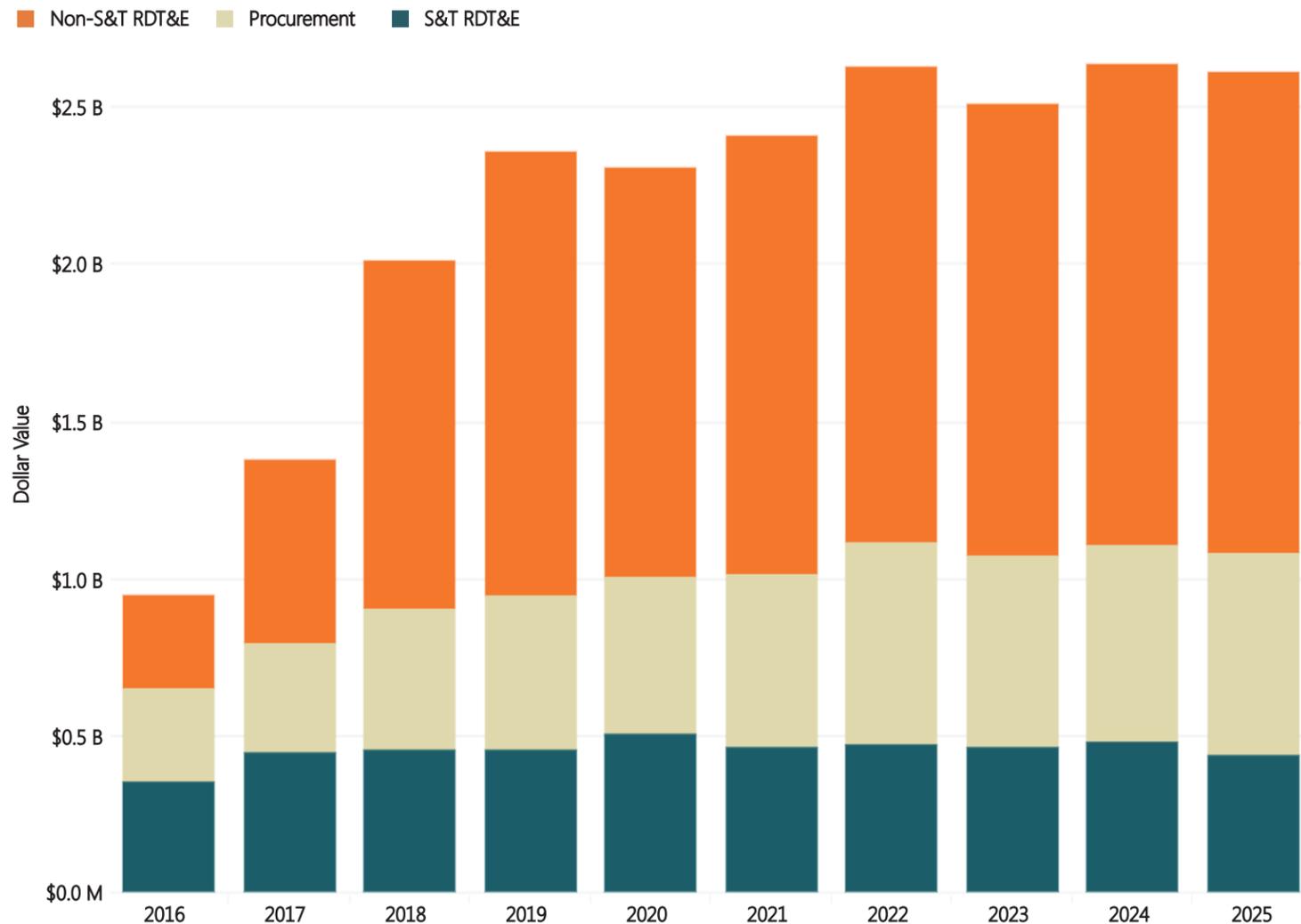
# DEPARTMENT OF DEFENSE CYBERSECURITY INVESTMENT: GROWING MISSION, SHRINKING BUDGET

Cyberspace is a critical enabler of warfighting in physical domains (air, land, sea), and is an increasingly contested domain in its own right. Recognizing the importance of cyberspace, in 2010 the Department of Defense (DoD) formed US Cyber Command. Since then, USCYBERCOM's mission has expanded and its posture has shifted away from network perimeter assurance toward a more proactive "defend forward" strategy.<sup>1</sup> After years of explosive growth, the cyber community will face increasing pressure to justify future budget increases. This is compounded by the difficulty of demonstrating Return on Investment (ROI) for enabling capabilities like cyber and the expected contraction of DoD budget topline.

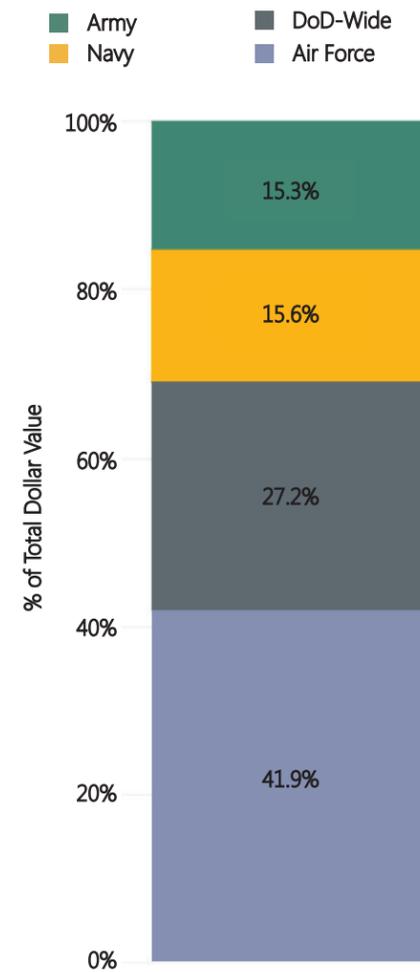
Prioritization of cyber investments was evident FY16-19, with cyber-related budget items ballooning by 153%. This growth significantly outpaced that of the overall investment budget (20%), as well as 27 of the 32 NDS priority areas Govini examined within DoD's investment budget.<sup>2</sup> Since FY19, however, cyber investments have leveled off, projecting only 9.3% growth by FY25. At this rate, the cyber-related investment budget will fail to keep up with inflation (14% by Comptroller estimates), which will reduce buying power.

As cyber investments level off, the cyber community must find creative ways to meet a growing mission with shrinking resources. This challenge will be compounded by increased scrutiny from oversight organizations and pressure to demonstrate ROI or more efficient use of existing capabilities.

## CYBER INVESTMENT BUDGET INCREASES BY FUNDING TYPE



## MILDEP SHARE OF CYBER INVESTMENT BUDGET



## BUDGET INSIGHTS

- Within the cyber research and development budget, funding growth was concentrated in investments that capitalize on mature technologies from the commercial market. Specifically, cyber investment in Non-Science & Technology (Non-S&T) Research, Development, Test, and Evaluation (RDT&E) accounts grew by 360% from FY16-19.
- The Air Force leads the DoD's investment in cyber, accounting for 41.2% of the cyber total. This share was spurred by the Air Force adding \$884M in cyber investment budget FY16-25, a 296% increase.
- The Army had the largest relative growth in cyber investments, growing by 402.3% from FY16 to FY25. However it still comprises the smallest portion of the DoD's cyber budget footprint (15%) despite being the executive agent for cyber ranges.

## DOD IS INVESTING IN ENABLING CAPABILITIES

- The Air Force prioritized developing cyber expertise within the current and future workforce as the largest single area of growth. Nonexistent in FY16, this new funding line emerged in FY18 at \$206M, growing to \$266M by FY25.
- The Air Force's Unified Platform (UP), which entered the budget in FY19 and grew to \$119.5M by FY25, was another major increase. UP is a common environment for cross-Service collaboration on cybersecurity operations and should improve interoperability in cybersecurity across the DoD.
- Contract spending in Endpoint Security capabilities to shore up common-use IT networks grew by 235% from FY15-19.

## BUT IS IT ENOUGH?

- Maximizing investment in mature technologies for cyber via non-S&T funds led to limited growth in investments for basic research and ground-breaking technologies. The cyber S&T budget has only grown 38% from FY16-25, narrowly outpacing inflation (22%), suggesting DoD prefers to react to, rather than drive, cybersecurity innovation within the commercial marketplace.
- Contract spending on Cyber Ranges, critical enablers of both offensive and defensive capabilities, grew to \$500M by FY18-19. However, as the cyber workforce expands, demand for these cyber range resources are likely to increase, which will require additional investment.

<sup>1</sup>As referenced in the 2018 DoD Cyber Strategy, the "defend forward" posture seeks to "disrupt or halt malicious cyber activity at its source, including activity that falls below the level of armed conflict."

<sup>2</sup>Only unmanned ground systems, hypersonics, unmanned surface systems, and short-range air defense grew faster than cyber among investment budget NDS priorities from FY16-19.