

FROM TTP TO CAP: INCREASING REACH ACROSS THE DHS MISSION

In 2011, the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) initiated the [Transition to Practice](#) (TTP) program to focus on the commercialization of federally funded cybersecurity research. S&T has since facilitated the launch of seven new startups and successful transition of 21 technologies, five of which were made available as open source software. Building off the success of TTP, S&T expanded this lab-to-market initiative to additional areas such as critical infrastructure security, data analytics, screening and detection, and first responder capabilities. This expanded effort is called the Commercialization Accelerator Program (CAP) and it replaced TTP in fiscal year (FY) 2019. The CAP mission is to identify mature, federally funded technology and transition it to the commercial market where it is available to all homeland security end users.

TAKING SOLUTIONS TO THE MARKETPLACE

CAP builds on S&T's process of funding projects through the full research and development (R&D) life cycle, which reduces the time it takes to transition research results into practice. CAP accomplishes its mission by developing partnerships and connecting the federal research community, network operators, Chief Information Officer/Chief Information Security Officer, and private industry—groups that have historically interacted inconsistently. The divide between the research phase and commercialization phase is known as the “Valley of Death.” Technologies are often stranded here because researchers lack the necessary resources to take the project to the marketplace. CAP is developing better lines of communication to bring solutions to the marketplace.

IDENTIFYING INNOVATION FOR COMMERCIALIZATION

CAP finds innovative projects across the federal government that demonstrate potential for commercialization with the following approach:

- Identify most promising and impactful technologies from R&D sources across the United States
- Accelerate the path from lab to market by reducing the risk in technologies and business models to increase market readiness
- Connect researchers with strategic partners in technology investment and government communities

CAP currently identifies promising technologies from several sources of federally funded R&D, with additional sources expected in the future. Current sources include:

- Department of Energy National Labs
- Department of Defense-Affiliated Labs
- Federally Funded Research and Development Centers

COMMERCIALIZATION PROCESS

Selected technologies go through a structured process designed to accelerate the path from lab to market that includes training, market validation, testing and evaluation, pilot deployment, and outreach. CAP technologies are introduced to potential partners, investors, and integrators and showcased at a national series of technology demonstration days. CAP supports multiple paths to transition, including licensing, startup creation, open source, and government use.

CAP PROGRAM BENEFITS

- Expands commercialization of solutions across DHS mission areas needs beyond cybersecurity
- Connects federal researchers with the investment community to improve the likelihood that technologies will transition
- Accelerates transitioning solutions to the marketplace to make accessible to all DHS end users
- Research teams will be active participants in the process, thereby gaining valuable and lasting hands-on experience