

Federally Funded Research and Development Centers

# Making Contributions that Strengthen our Nation

Federally funded research and development centers (FFRDCs) fulfill several roles. They address critical national challenges, contribute scientific and technical knowledge to the worldwide research community, and drive innovation that benefits our citizens. As an operator of multiple FFRDCs, MITRE upholds this tradition of service in the public interest, striving to improve national security, safety, efficiency, and economic progress.

## Addressing Critical Mission Priorities

**Radar breakthrough:** Supporting warfighters, at a fraction of conventional systems' cost and size, with a prototype system that reduced IED deaths in Afghanistan. It's now being transitioned into other uses, including drug-smuggling interdiction.

**Reducing healthcare fraud:** MITRE's big-data analytics have helped identify more than a billion dollars' worth of fraud over the last two years as part of the Healthcare Fraud Prevention Partnership.

**Critical reviews of government programs and capabilities:** MITRE led the congressionally mandated VA Choice Act of 2014 assessment, the most comprehensive review of the veterans' health system ever undertaken. The resulting reports offered concrete recommendations for improving access and care for veterans and their families. For this effort, MITRE drew on the expertise of partners in the private sector, and convened a "Blue Ribbon Panel" of health experts from across the nation.

**Making the skies safer:** More than 100 commercial companies and government agencies entrust their proprietary aviation safety data to MITRE through a groundbreaking initiative called ASIAs. Operating under the unique authority to access government and private sector data, we keep this data secure and analyze it to detect ways to improve air safety.

**National cybersecurity infrastructure:** Hundreds of companies and agencies have adopted our

game-changing threat-detection tools and standards that make it easier to fight back. STIX and TAXII are just two examples of capabilities created by MITRE and adopted by the private and public sector.

**Improving government acquisition:** Agile is the leading software development approach in the commercial sector. MITRE has been a driving force in bringing agile practices to government. We published Agile Acquisition guides for the DoD and FAA and are working with multiple agencies on adopting agile practices for their acquisition programs.

**New runway departure standard:** Saves airlines \$20 million yearly at each airport that adopts it.

**Increased IRS efficiency:** MITRE processes and tools have helped change how the IRS manages tax returns. IRS officials reported that 2013–2015 were the smoothest processing years since electronic filing began in 1986, with refund timeliness up and incidents causing delays down year-over-year.

**Unmanned systems in civil airspace:** We're working on all fronts, both with innovative sense-and-avoid concepts and by supporting all the major governmental agencies with a stake in integrating UAS into civilian airspace.

**Veterans' homelessness:** MITRE's model-based engineering methods helped the VA allocate its budget more efficiently and contributed to a program that's reduced homelessness among veterans by more than 45 percent in just a few years.

*The MITRE Corporation is a not-for-profit organization chartered to work in the public interest. We apply our skills in systems engineering, research and development, and information technology to help the government address issues of critical national importance.*

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**Mobile technology:** Designing lighter, cheaper communications gear for soldiers using commercially available technology that can be fielded faster.

**Enabling electronic health records (EHR) to work together:** More than 240 million people have medical data stored in a commercial EHR system certified by MITRE tools and standards.

### Facilitating Ingenuity

As a public-interest company, it is an essential that we foster innovation in a variety of ways:

**Technology transfer and commercialization:** In the past five years, MITRE implemented nearly 550 technology licenses and received or filed for more than 155 patents. Several cybersecurity start-ups currently use MITRE concepts and software prototypes. In 2016, eight companies that license MITRE technology produced 59 new jobs.

**Open-source technology:** MITRE offers nearly 70 open-source software products available through our website, with more in development.

**Problem-solving catalyst:** MITRE is a charter member of organizations, such as the Massachusetts Innovation Bridge, that link advances from regional start-up communities to federal agencies.

**MITRE Challenge:** We host competitions to recognize great ideas that might never have come to the government's attention. Each Challenge addresses a specific, complex problem, such as dealing with unauthorized unmanned systems or safeguarding the Internet of Things. Winners of each MITRE Challenge receive a financial prize and the opportunity to demonstrate their newly developed capabilities to a variety of federal agencies. If appropriate, MITRE helps participants with outreach and licensing of their new technologies to government and industry.

### Thought Leadership

- There are nearly 250,000 monthly online page views for MITRE's Systems Engineering Guide, which offers practical advice for managing complex projects.
- We make more than 1,800 technical publications available at [www.mitre.org](http://www.mitre.org).
- Our blog, *Cyber Connections and Directions*, offers relevant commentary by professionals, for professionals.

### Supporting Veterans and Warfighters

- Winner of the Northern Virginia Technology Council's first-ever Veterans Employment Initiative Veteran Service Award, honoring our deep level of engagement with the veteran community.
- Our Veterans Employment Training program offers internships to severely wounded service members.
- Employee volunteers support the Suits for Vets donation program and annually send hundreds of care packages to troops overseas.

### Building a Future that Works

Helping veterans, offering educational opportunities, and being a positive force in our communities. These are just some of the other ways we support our nation.

- MITRE hires more than 400 high school and college students yearly, giving them opportunities to apply their STEM (science, technology, engineering, and mathematics) studies to real-life work experiences.
- To encourage more students to enter the much-needed cybersecurity workforce, we host an annual Capture the Flag cybersecurity competition that attracts dozens of teams of high school and college students from across the U.S.
- From a commitment to sustainability and an emphasis on diversity to a spirit of volunteerism, we make social responsibility a practice, not a slogan.