



# Science and Technology Policy Institute

The Science and Technology Policy Institute (STPI) is one of three federally funded research and development centers (FFRDCs) operated by the Institute for Defense Analyses (IDA), a nonprofit corporation. STPI's interdisciplinary staff provides responsive, high-quality analyses of national and international science and technology issues important to its primary sponsor, the White House Office of Science and Technology Policy. Other executive branch sponsors include the National Science Foundation, the National Institutes of Health, the National Institute of Standards and Technology, the National Aeronautics and Space Administration, the National Space Council, the Defense Advanced Research Projects Agency, the Department of Commerce and the Department of Energy.

## Addressing a range of topic areas

For these and other federal sponsors, STPI provides technical and analytical support that focuses on science and technology issues across a range of areas:

- Critical and emerging technologies.
- Critical infrastructure security and resilience.
- Energy, environment and climate.
- Health and life sciences.
- Homeland and national security.



- Information and communication technologies.
- Innovation and competitiveness.
- International science and technology.
- Research and development infrastructure.
- Social and behavioral sciences.
- Space, aviation and transportation.
- STEM education and workforce.

## Recent examples of our work

Recent contributions STPI has made to the federal science and technology enterprise include:

- Policy analysis and development.
  - Supporting implementation of the Federal STEM Strategic Plan.
  - Assisting with national policies on scientific integrity and evidence-based policy making.
  - Supporting epidemic modeling and forecasting for future pandemic threats.
- Program evaluation.
  - Assessing diversity, equity and inclusion practices in agency funding programs.
  - Conducting technical analyses and evaluation studies for planning, coordinating and managing cancer research programs.
  - Evaluating effectiveness of programs to increase state-level competitiveness for research funding.
- Science and technology assessment.
  - Assessing effects of investments in the development of artificial intelligence and nanotechnology.
  - Examining implications for on-orbit servicing, assembly and manufacturing.
  - Developing a framework for critical and emerging technologies and analyzing their supply chain chokepoints.
  - Identifying data to characterize and assess quantum information science research and development.
- Data collection and analysis.
  - Reviewing possible improvements to current space weather benchmarks.
  - Examining established and emerging bibliometric indicators to evaluate leading-edge science.
- Strategic planning and metrics.
  - Supporting a research initiative to provide access to clean drinking water in the U.S.
  - Supporting development of a national strategy and implementation plan for orbital debris research and development.
  - Facilitating development of strategic plans for national science and technology centers.
  - Investigating feasibility and advisability of a National Artificial Intelligence Research Resource Task Force.
- Economic and business case analysis.
  - Assessing economic benefits and losses from foreign STEM talent in the United States.
  - Modeling government and commercial market supply and demand for orbital, lunar and cislunar in-space logistics.

## Our staff

STPI's researchers include physical scientists, life scientists, social and behavioral scientists, engineers, economists and STEM experts. Most hold master's degrees or doctorates in their respective fields. When needed, STPI also draws on the talents of the large, diverse research staff of another IDA-managed FFRDC, the Systems and Analyses Center, which supports the Office of the Secretary of Defense.

