

SPIE Government Affairs Update Photonics West 2026

Longest Government Shutdown in US History at 43 days



Appropriations: Current Status



The CR ended on January 30, extended for DHS

Though some agency cuts, it largely reject Trump's request for steep cuts.

The FY26 minibus CJS/E&W package:

- \$24.4 billion for NASA, a 1.6% cut (including \$7.25 billion for NASA Science, a 1.1% cut);
- \$8.75 billion for the National Science Foundation, a 3.4% cut;
- \$8.4 billion for the Department of Energy's Office of Science, a 1.9% increase;
- \$6.17 billion for the National Oceanic and Atmospheric Administration, roughly flat funding;
- \$1.42 billion for the U.S. Geological Survey, a 2.0% cut; and
- \$1.18 billion to the National Institute of Standards and Technology, a 2.3% increase (without earmarks)

Defense and Labor/HHS Package:

- \$48.7 billion for the National Institutes of Health, roughly level funding
- \$149 billion for the Department of Defense's Research, Development, Test, and Evaluation programs, a 4% increase.

Major Cuts to Science Agencies

- Reductions in Force (RIFs), resignation offers, hiring freeze
 - The Trump administration shrank the federal work force by about 220,000 workers through November, about a 10% cut
 - NSF has lost one-third of its staff
 - NIH overall a 18% reduction
 - 14 of the NIH's 27 units are helmed by interim leaders
 - DOE reduced by 14%
 - Within the Commerce Department both BIS and EDA shrunk by 20%, NIST by 15%
 - NASA reduced by 6% overall



Frozen and canceled Grants

- Administration simply refusing to spend appropriated funds deemed contrary to the administration's agenda
- Significant cuts to clean energy and EDI related grants

EDA Tech Hubs

- \$10 billion Authorized over five years, Congress Appropriated \$500 million for its first year
- Additional \$500 million passed in the FY25 NDAA
- \$41 million included on FY26 Commerce, Justice Science portion of the minibus package
- On October 23, 2023, EDA announced the inaugural 31 designated Tech
- On July 2, 2024, EDA announced \$504 million in Implementation awards for 12 of the 31 designated Tech Hubs. The remaining 19 Tech Hubs received Consortium Accelerator Awards of \$500,000 each to advance their strategies and attract additional investment.

Elevate Quantum Tech Hub (Colorado, New Mexico)

Focus: quantum information technology

Estimated Award Amount: \$41 million

Headwaters Hub (Montana)

Focus: smart photonic sensor systems

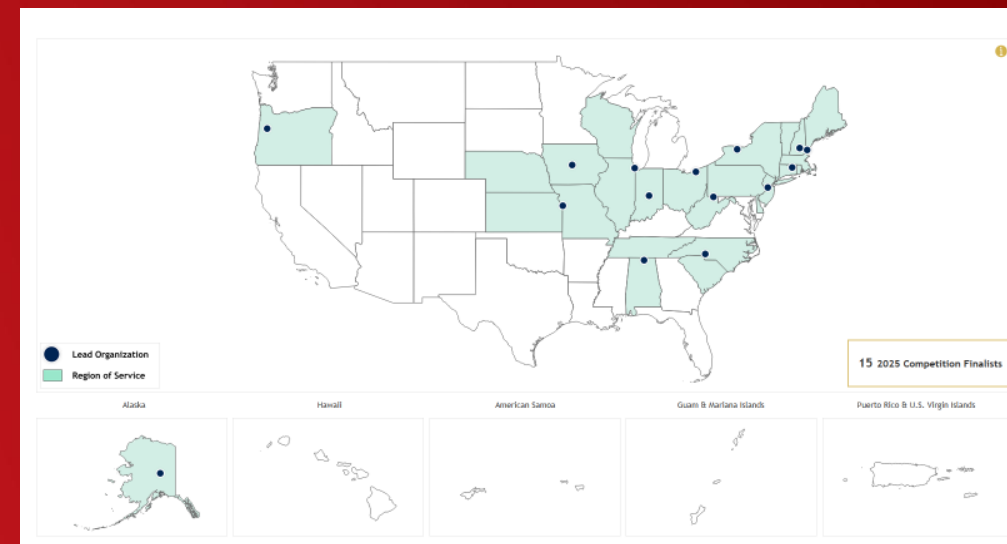
Estimated Award Amount: \$41 million

- On September 19, 2025, EDA announced a new NOFO (PDF) open to the 19 designated Hubs that did not receive EDA Tech Hubs Implementation Awards, to fund new Implementation projects. EDA expects to announce these awards in spring 2026.



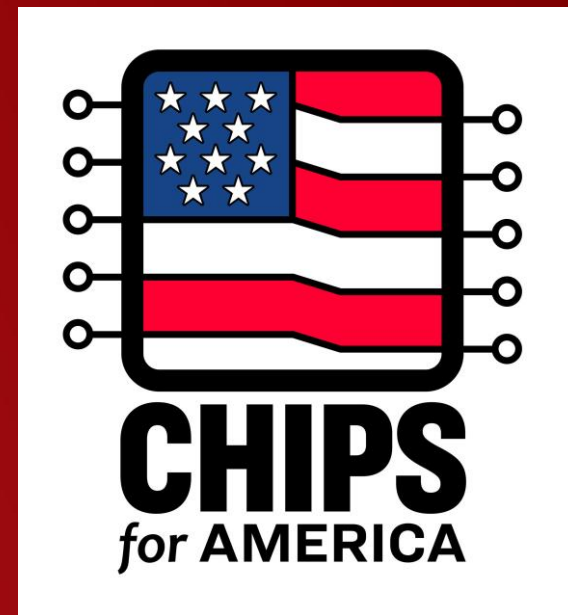
NSF engines

- The CHIPS and Science Act authorized an annual funding target of \$650 million.
 - NSF appropriated \$200 million to the program in its first year.
 - Significant cuts to NSF budgets in FY24 and FY25.
- 15 finalists advanced to the next stage of the program's second competition
 - Advancing Photonics Technologies NJ
 - STELLAR: Advancing Laser Technologies Rochester NY
- FY26 200 million, 20% EPSCoR



Trump Administration Overhauls CHIPS R&D Plans

- \$50 billion for a suite of programs to strengthen and revitalize the US position
- “clawing back” \$7.4 billion from Natcast
 - nonprofit created in 2023 to operate the National Semiconductor Technology Center
 - DOJ claims the nonprofits creation violates federal law
- Broad solicitation for semiconductor research issued in September
 - primary mechanism for the department to make awards for the NSTC and other CHIPS R&D programs
 - Proposals should seek at least \$10 million and will be accepted on a rolling basis through Sept. 30, 2029
 - Likely used to accelerate product development at private semiconductor companies in exchange for equity, instead of focusing on high-risk, exploratory research.
- R&D facilities canceled
 - Albany Nanotech Complex in New York
 - Design and Collaboration Facility in California
 - Advanced Packaging Piloting Facility in Arizona
- Digital twins for chip manufacturing informed its 121 members that the U.S. Department of Commerce will terminate its US \$285-million five-year contract.



Reconciliation



- The "One Big Beautiful Bill" tax-and-spending plan was passed by congress on July 3, 2025
- Reintroduces tax rules allowing companies to fully deduct domestic research costs in the year they occurred.
- Rescinds unobligated funding from the Inflation Reduction Act including a phase out of the clean energy production tax credit by the end of 2027

- \$25 billion for the “Golden Dome” missile defense shield, including \$7.2 billion for the development and procurement of military space-based sensors, \$5.6 billion to develop space-based and phase intercept capabilities, and \$250 million to develop directed energy capabilities.
- \$250 million for the Defense Advanced Research Projects Agency’s Quantum Benchmarking Initiatives.
- \$4 billion for the National Nuclear Security Administration
- nearly \$10 billion for NASA programs

High Skilled Immigration: H1-B Fee



- Employers seeking to employ an H-1B worker who is abroad filed after September 21, 2025 must pay an additional \$100,000 fee via the US Treasury's website
- The fee does not apply to H-1B petitions for employees who are present in the US and whose employers request to change their status to H-1B or extend their H-1B status

- Employers of F-1 students, H-4 Employment Authorization Card holders, or other nonimmigrants who wish to change their status to H-1B do not incur the fee
- Status in the US must be current to not incur the fee
- Annual H-1B visa lottery scheduled to begin in March
- Lower court ruled in favor of the administration; Appeals court agreed to hear oral arguments in February
- Exceptions to the \$100,000 fee can be granted (H1BExceptions@hq.dhs.gov)

High Skilled Immigration: Weighted Lottery System

- On December 29, 2025, USCIS published a final rule, Weighted Selection Process for Registrants and Petitioners Seeking to File Cap Subject H-1B Petitions.

Weighting by wage level

Level I (entry-level) – Basic understanding and close supervision. (reduced by 48%)

Level II (qualified) – Moderate experience and judgment. (Increased by 3%)

Level III (experienced) – Substantial experience and independent work. (increased by 55%)

Level IV (fully competent) – Advanced expertise and often supervisory roles. (increased by 107%)

- Wage levels **vary significantly based on profession and location**, with urban wage levels often exceeding those in suburban and rural areas.
- The rule aims to incentivize employers to offer higher wages and petition for higher-skilled positions.
- new framework will apply to both the H-1B regular cap of 65,000 visas and the U.S. advanced degree exemption (Master's cap) of 20,000 visas.
- Requires additional information to be provided in the registration process, including the appropriate SOC code for the offered position, the area of intended employment, and the highest OEWS wage level that is met by the offered salary.



Duration of Status

Students (F-1) and exchange visitors (J-1) are admitted for the time needed to complete their academic program or exchange, plus a grace period (currently 60 days for F-1, 30 for J-1).

In August, DHS proposed a rule to restrict international students by replacing the current “duration of status” policy with fixed admission periods, more difficult for students to complete programs lasting more than four years.

Increased compliance burdens and uncertainty for international students

SPIE joined other organization in submitted response opposing



Optional Practical Training (OPT)

Optional Practical Training allows international students to work for 12 months in their field of study before or after completing their course requirements. STEM OPT allows students to gain practical experience through working an additional 24 months (beyond OPT) in a science, technology, engineering or math field.

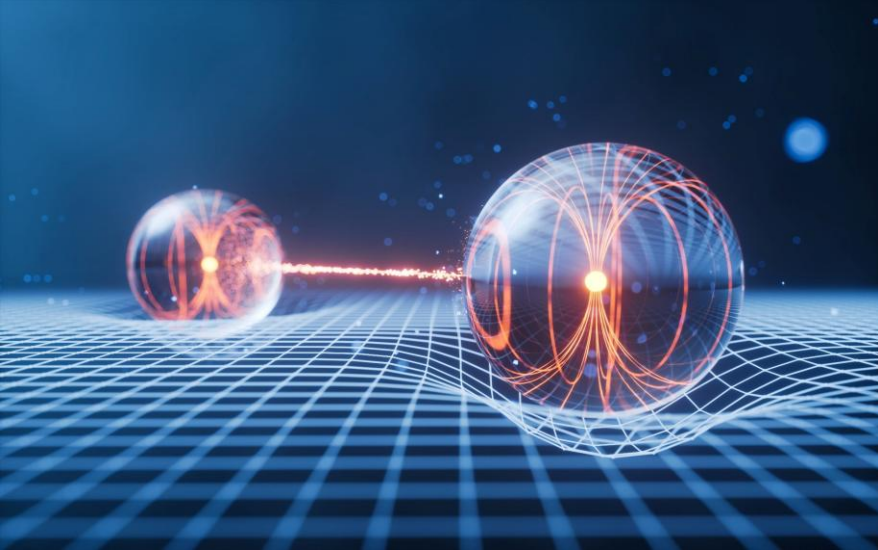
Elimination or reform possible

SBIR/STTR Reauthorization

- The statutory authority for the SBIR/STTR programs lapsed on September 30, 2025, meaning federal agencies can't issue new funding opportunities.
- Senator Joni Ernst seeking reforms, Senator Ed Markey has offered a counter proposal to Ernst
- Fast track if agreement is reached
- Likely to be longer extension, not permanency
- Some reforms likely, example limit on repeat awardees



**THE SBIR/STTR
REAUTHORIZATION
ACT OF 2025:
INVESTING IN
SMALL BUSINESS
INNOVATION AND
ENTREPRENEURSHIP**



National Quantum Initiative (NQI) reauthorization

- The original National Quantum Initiative Act was passed in 2018 during President Donald Trump's first administration.
- Funding authorizations lapsed in September 2023
- Attempts to reauthorize in the 118th congress were unsuccessful
- February 18, 2025, Senators Durbin and Daines introduce the Department of Energy piece of the NQI
- On January 8, 2026, U.S. Senators Maria Cantwell (D-Wash.), Todd Young (R-Ind.), Dick Durbin (D-Ill.), Steve Daines (R-Mont.), Ben Ray Lujan (D-N.M.), Marsha Blackburn (R-Tenn.), Tammy Baldwin (D-Wisc.), Ted Budd (R-N.C.), Chuck Schumer (D-N.Y.) and Mike Rounds (R-S.D.) introduce the Commerce piece including NSF, NIST and NASA
- House of Representatives introduction expected soon, hearing on 1/22

OSTP Seeks Input to Accelerate US Scientific Innovation



Request for Information on Accelerating the American Scientific Enterprise

The White House Office of Science and Technology Policy (OSTP) published a [request for information](#) (RFI) on Nov. 26, 2025

- **Strengthening Public–Private Collaboration**
- **Accelerating Translation and Technology Transfer**
- **Regional Innovation Ecosystems**
- **Empowering Small and Medium-Sized Businesses**
- **Enabling High-Risk, High-Reward Research**
- **Supporting Novel Research Institutions**
- **Identifying and Developing Talent Nationwide**
- **Ensuring Equitable Public Benefit**
- **Strengthening Research Security With Minimal Burden**

DOD increases restrictions on Fundamental Research

- On January 8th, the Department of Defense announced that it will tighten restrictions on its fundamental research work with certain foreign entities and increase annual security reviews.
 - Blocks DOD from providing funds to entities on the agency's list of Chinese military companies operating in the U.S. and entities with "a documented history of patent or intellectual property theft."
 - Annual "spot checks" of all fundamental research awards that have security mitigation measures and at least 25% of other fundamental research awards.
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- House CCP Committee in a report published last September found a "troubling" number of DOD research grants involved "entities directly tied to China's defense research and industrial base."

SPIE Advocacy and Action Center

Keeping you informed and providing tools to act

Science is under attack - we can fight back

Your voice makes a difference. Getting involved can be as simple as sending an email to your representatives. Making sure that your representatives in the US House and Senate know how their decisions on key issues will impact you is an important and simple step to help shape policies.

SPIE is providing tools to make this outreach to your representatives easy. Below you will see issues of importance to our community with links to form letters that you can edit and send directly to your elected representatives.

You will also find detailed information to keep you informed on policies and the latest legislative actions that will affect you and the optics and photonics community.

Act now and stay informed. Our continued pressure is key.



Make your voice heard

Science funding is under attack in the United States. Elected officials need to hear from their constituents on why federal funding of science is vital.

Questions?

