

# LEWIS-BURKE

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PREPARED BY LEWIS-BURKE ASSOCIATES LLC

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## **Introduction**

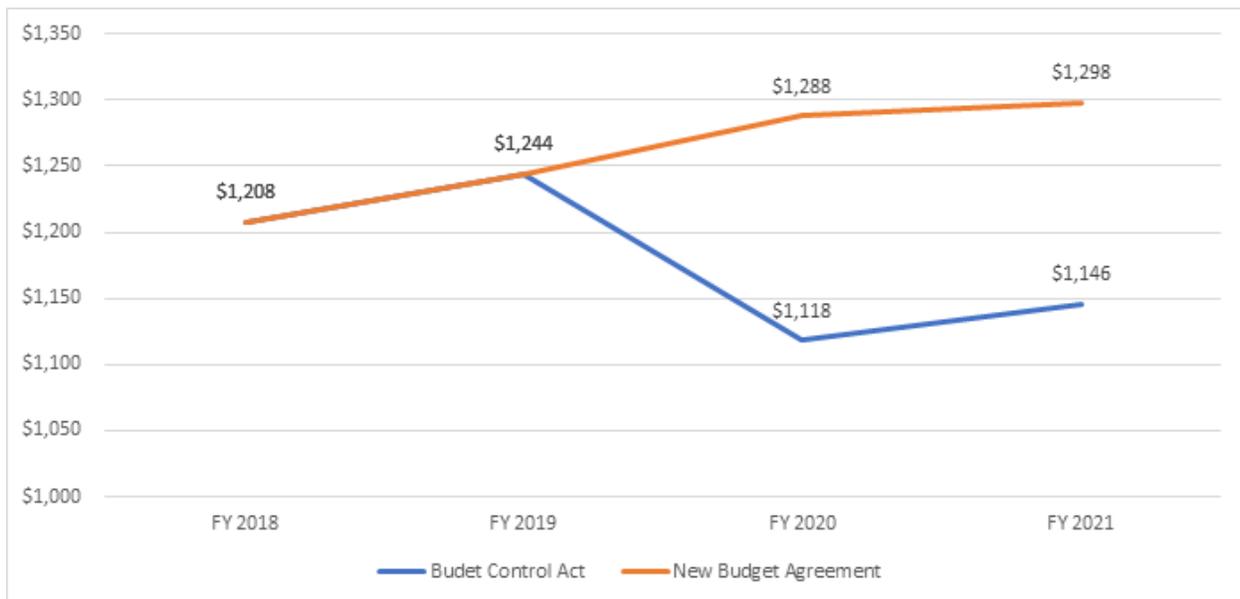
This edition of the Tufts Washington Update for late July includes Congressional and Administration updates, agency updates, and funding opportunities. Faculty, staff, and researchers are welcome to schedule calls with the Lewis-Burke Tufts team or meet with the team when they visit Washington, DC. Contact Amber Cassady, Lewis-Burke Associates LLC, at [amber@lewis-burke.com](mailto:amber@lewis-burke.com) with any questions or comments related to the Update's content, for more information on updates and opportunities, or to add a new recipient to the distribution list.

## Congressional and Administration Updates

### Congress and the White House Strike a New Two-Year Budget Agreement Lifting Spending Caps

In a bipartisan vote of 284-194 on July 25, the House passed a bill to extend the debt limit and set spending levels for the coming two fiscal years. The House took quick action to pass the deal after the White House and House Speaker Nancy Pelosi (D-CA) reached a tentative two-year budget deal that would raise spending caps by \$320 billion and suspend the debt ceiling for two years. The budget agreement would avoid a \$126 billion, or 10 percent, cut in discretionary spending in FY 2020 required in the Budget Control Act of 2011, and instead would increase discretionary spending in both FY 2020 and FY 2021 above FY 2019 funding levels. Only about one-fourth of increased spending will be offset. The agreement would include \$77 billion in offsets primarily by extending automatic cuts to mandatory programs, such as Medicare, and extending customs feeds assessed on cargo and passengers arriving in the US. by two years through 2029. This will make the third time the two percent cut in Medicare has been extended since enactment in the *Budget Control Act of 2011*.

**Graphic 1. Comparison of Discretionary Spending between the Budget Control Act and the New Budget Agreement (in billions of dollars)**



*Note: Funding levels reflect base funding and do not include additional funding for Overseas Contingency Operations which are not subject to the budget caps.*

Below are key elements of the budget agreement:

- The budget deal would provide \$738 billion for defense spending and \$632 billion for non-defense spending in FY 2020 (see Table 1 below for comparison).
  - Defense spending would grow by \$22 billion, or 3 percent, above FY 2019 enacted levels. This would be \$5 billion higher than the House Democrats' proposal but short of the Trump Administration's \$750 billion request. Defense spending includes \$666.5 billion for core defense programs and \$71.5 billion for the Overseas Contingency Operations account.

- Non-defense spending would grow by \$35 billion, or 4.5 percent, above FY 2019 enacted levels. This would be \$15 billion less than the House Democrats’ proposal but \$90 billion above the Trump Administration’s request.
- Only about one-fourth of increased spending will be offset. The agreement would include \$77 billion in offsets primarily by extending automatic cuts to mandatory programs, such as Medicare, and extending customs fees assessed on cargo and passengers arriving in the US. by two years through 2029.
- The budget agreement would suspend the debt ceiling until July 1, 2021.

**Table 1. Discretionary Spending (in billions of dollars)**

	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
<b>Defense spending</b>	716	738	740.5
<b>Non-defense spending</b>	597	632	634.5
<b>Total</b>	1,313	1,370	1,375

Of interest to the academic and research community, while the budget agreement provides a boost in funding in FY 2020, there is almost no growth in funding in FY 2021. The budget agreement provides only a \$2.5 billion increase in non-defense spending in FY 2021, likely increasing the importance for advocacy focused on robust funding in FY 2020 for federal science agencies and federal programs that fund research and health care priorities.

The Senate is expected to pass the budget agreement early next week. Following a successful passage of the budget agreement, the Senate Appropriations Committee plans to finish drafting the 12 appropriations bills during the August recess and start advancing them in September. Politico reported this week that Senate Appropriations Chairman Richard Shelby said that “he’ll likely divvy up fiscal 2020 funding among the 12 spending bills during the August recess, setting those 302(b) allocations so subcommittee markups can begin when lawmakers return from the summer break.”

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## Agency Updates

### National Science Foundation Reveals More Plans for Social Behavioral and Economic Sciences (SBE) Directorate Reorganization

On July 18, Dr. Arthur “Skip” Lupia, Assistant Director for the Social Behavioral and Economic Sciences (SBE) Directorate at the National Science Foundation (NSF) presented to the Coalition for National Science Funding (CNSF) with updates on his plans to reposition the SBE portfolio. As Lewis-Burke reported earlier this year, Dr. Lupia offered insights into ideas to rename SBE programs and descriptions and showcase real life examples of impacts from SBE research.

In the CNSF meeting, Dr. Lupia provided additional examples of broader impacts of SBE funded initiatives and hinted at the reorganization of the Directorate. However, instead of changes to programs being made in September as previously projected, he said that changes to programs would be announced through a dear colleague letter (DCL) in August or September, and impacts awards due in 2020. He also forecasted a few more new initiatives SBE plans to roll-out this fall, most of which are updated versions of existing programs, including:

- *Human Networks and Data Science*: This program will incorporate previous program activities related to both data science and human networks. It will be based on an evolution of the current [Resource Implementations for Data Intensive Research in the Social, Behavioral and Economic Sciences \(RIDIR\)](#) program at NSF.
- *Strengthening American infrastructure*: This program will focus on research that develops collaborative intelligence for planning and tackling infrastructure challenges by incorporating human dimensions from the outset of planning. The program is intended to be NSF wide with a major SBE component. Dr. Lupia discussed how there are often unintended consequences in infrastructure planning that could be avoided with better and earlier consideration of social and behavioral aspects. He gave an example of how drainage systems were set up to prevent house flooding in Houston that ended up flooding streets instead, disrupting first responders.
- *Security and Preparedness*: SBE funds security initiatives across its programs, but currently this research is hard to locate. This program is intended to consolidate these efforts into one program. It was clear that Dr. Lupia considers this area to be a priority where he may seek to provide additional funding.
- *Science of Learning and Augmented Intelligence*: This builds off concepts from the [Science of Learning program](#) and expired [Science of Learning Centers](#) at NSF. In addition to the evolution of these programs, the new effort will include augmented intelligence research, or research on how human performance and understanding can be enhanced by technology. Augmented intelligence is meant to be complementary to other Artificial Intelligence (AI) research efforts across NSF.
- *Ethical and Responsible Research*: This would be an evolution of [Cultivating Cultures for Ethical STEM \(CCE STEM\)](#). SBE intends to have an increased emphasis on ethics and replicability of research.
- *New Student Programs*: Dr. Lupia is looking into ways NSF could build on the American Political Science Association’s [Ralph Bunche Summer Institute \(RBSI\)](#), which provides support for underrepresented students considering doctoral studies in political science. The new program could target other communities like veterans pursuing STEM careers.

These concepts are still being developed and are subject to change prior to this fall. Dr. Lupia added that, once these changes have been implemented, SBE will look to leverage their strong brand, risk-oriented research portfolio, networks, and peer review system to attract external partners, including other agencies, for widescale research initiatives. Dr. Lupia has recently reached out to the Department of Defense (DOD) and the National Institutes of Health (NIH) as potential partners to advance SBE supported research going forward.

*Sources and Additional Information:*

- Lewis-Burke's May 2019 report on SBE's new direction can be found at [https://www.lewis-burke.com/sites/default/files/agency\\_update\\_-\\_nsf\\_outlines\\_new\\_direction\\_for\\_sbe\\_programs.pdf](https://www.lewis-burke.com/sites/default/files/agency_update_-_nsf_outlines_new_direction_for_sbe_programs.pdf).

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### **Status and Upcoming Competition for Department of Energy Frontier Research Centers**

July 2019 marks the 10 year anniversary of the establishment of the first Department of Energy (DOE) Energy Frontier Research Centers (EFRC). Since 2009, DOE has funded 82 EFRCs, which have cumulatively published more than 11,600 peer-reviewed scientific papers, issued over 180 patents and trained over 5,000 students and postdocs. On July 29-30, DOE will hold its EFRC Principal Investigator (PI) meeting in Washington, DC to celebrate this milestone, have keynote speakers and present awards for EFRCs that have had the most significant scientific, technological, and workforce development impacts. Over 800 faculty, researchers, DOE officials and program managers, and officials from other federal agencies are expected to attend the event. Lewis-Burke's advance intelligence report on the next DOE EFRC competition can be found [here](#).

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### **Department of Energy Research and Funding Priorities for Materials and Chemistry Research**

On July 11-12, the Department of Energy Basic Energy Sciences Advisory Committee (BESAC) met to discuss research and funding priorities for the Office of Science's largest program—Basic Energy Sciences (BES)—with an annual budget now exceeding \$2 billion. BES funds primarily materials and chemical sciences but also geosciences and biosciences and also builds and operates the government's largest collection of world-class scientific user facilities.

In fiscal year (FY) 2019, Congress appropriated \$2.166 billion for BES. The FY 2020 President's budget request proposed a \$308 million reduction compared to FY 2019, for a total of \$1.858 billion. The FY 2020 House Energy and Water appropriations bill, which funds DOE and the Office of Science, rejected this proposed cut and instead would provide \$2.143 billion. While overall funding proposed by the House in FY 2020 would be less than FY 2019, this reduction is primarily due to the end of construction funding for the Linac Coherent Light Source-II at SLAC. The House funding levels, for example, would increase research funding by \$58 million and facility operations by \$78 million. The Senate has not yet advanced any appropriations bills. Lewis-Burke's full analysis on the BESAC meeting can be found [here](#).

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## **Networking and Information Technology Research and Development (NITRD) National Coordination Office Issues RFI on Strategic Computing**

The Networking and Information Technology Research and Development (NITRD) National Coordination Office (NCO) has issued a request for information (RFI) seeking input on a planned update to the objectives that guide the National Strategic Computing Initiative (NSCI). The need for this is premised on the fact that the strategic computing landscape has changed significantly since NSCI was first launched under the Obama Administration in 2015, and that as such, the objectives themselves should be revisited. These are the strategic objectives that currently guide NSCI:

1. Accelerating the delivery of capable exascale computing systems
2. Increasing technology coherence between technology base used for modeling and simulation and that used for data analytic computing
3. Establishing, over the next 15 years, a viable path forward for future HPC systems, even after the limits of current semiconductor technology are reached
4. Creating an enduring national HPC ecosystem
5. Developing an enduring public-private partnership to ensure that the benefits of the research and development advances are, to the greatest extent, shared between the United States Government and industrial and academic sectors

Responses are due **August 23, 2019**. Comments should specifically address one or more of the seven questions included in the RFI.

*Sources and Additional Information:*

- The RFI can be found at <https://www.federalregister.gov/documents/2019/06/18/2019-12866/request-for-information-on-update-to-strategic-computing-objectives>.

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## **Funding Opportunities**

### **National Endowment for the Humanities Releases Grant to Host Convenings on K-12 History and Civics**

The National Endowment for the Humanities (NEH) in partnership with the U.S. Department of Education's (ED) American History and Civics Education—National Activities program recently released a funding opportunity for a cooperative agreement to support two national convenings on improving best practices in the teaching of American history, civics, and government education in K-12 education. The awarded institution will also be expected to publish a report on the findings and hold a national forum in Washington, D.C. to launch the development and implementation of a robust publicity strategy to educators and the general public.

The convenings must have attendees including roughly 20-30 non-federal national leaders and researchers from educational institutions or other organization. There will also be approximately 50 federal staff members in attendance. The purpose of the convenings will be to address the key needs, priority gaps, and achievement gaps in K-12 civic education. Proposals should consider broad applicability (demographic, technological, and economic diversity) and prioritize a detailed dissemination plan.

The recipient will organize and plan all logistics, agendas, and materials for the national convenings, the national forum in Washington, D.C. and any following dissemination events or strategies.

**Due Date:** Proposals are due by **midnight EDT on August 12, 2019.**

**Total Funding and Award Size:** One award will be granted at a maximum amount of \$650,000.

**Eligibility and Limitations:** Eligible applicants include institutions of higher education and U.S. nonprofit organizations with 501(c)(3) status with demonstrated expertise in improving the quality of American history and civics education.

#### *Sources and Additional Information:*

- The solicitation is available at <https://www.neh.gov/grants/education/state-american-history-and-civics-education-national-convening>.
- The Full notice of funding and program description is available at [https://www.neh.gov/sites/default/files/inline-files/fy2019-american-history-civics-education-nofo\\_0.pdf](https://www.neh.gov/sites/default/files/inline-files/fy2019-american-history-civics-education-nofo_0.pdf).

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### **Army Research Laboratory Issues RFI for Partnership Intermediary Agreement**

In support of the Army Futures Command, the Army Research Laboratory (ARL) has issued a request for information (RFI) for potential Partnership Intermediary Agreement (PIA) partners to create a more efficient and effective defense laboratory that can be adaptive and responsive to the challenges of 21st century national security. It is widely acknowledged that innovation depends on bringing multiple disciplines together to engage in collaborative projects that often yield unpredictable, but highly productive results. Formal and informal interactions among scientists lead to knowledge-building and

research breakthroughs. By bringing together academia, industry, and government, the Army can enhance its performance through collocated R&D collaboration. ARL is exploring the establishment of a PIA partner to serve as an intermediary to assist ARL to accomplish the following:

- Outreach
- Facilitation of Collaborative Research
- Business Development
- Technology Assessments
- Research and Technology Forecasting

**Deadline:** Responses to the RFI must be received no later than **5:00PM PST on August 8, 2019.**

*Sources and Additional Information:*

- The RFI can be found at <https://www.fbo.gov/index?s=opportunity&mode=form&id=6e5db969addbdf7ba9ee98327d0cd87&tab=core&cvview=0>.

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### **U.S. Agency for International Development New Partnerships Initiative (NPI) Announces Call for Concept Papers in Global Health**

The U.S. Agency for International Development (USAID) announced two calls for papers through its New Partnerships Initiative (NPI) for global health. As previously reported by Lewis-Burke, NPI is a new USAID effort that focuses on engaging new and underutilized partners and incentivizing engagement with the private sector to diversify and expand partnerships. The calls accompany NPI's Global Health Annual Program Statement (GH APS), which intends to "facilitate locally generated solutions focusing on country empowerment and accountability to improve health services."

USAID's global health programs focus on three overarching strategic priorities: preventing child and maternal deaths, controlling the HIV/AIDS epidemic, and combating infectious diseases. The two calls for papers, also known as "rounds," that USAID recently released under the 2019 GH APS include: 1) Community Health Networks and 2) Expanding Health Partnerships. More information on each round is included below:

#### ***Round 1: Community Health Networks (CHN)***

The goal of Community Health Networks (CHN) is to "expand demand for and availability of community health services to decrease maternal and child morbidity and mortality" through engaging with new and underutilized local organizations. This includes improving access to care, reducing barriers, and addressing social determinants for reproductive health. Papers for this round should specifically focus on maternal, neonatal, child health, and voluntary family planning.

**Award Size:** USAID anticipates making up to three awards, not to exceed a cumulative total of \$75,000,000 over five years.

## **Round 2: Expanding Health Partnerships (EHP)**

The goal of Expanding Health Partnerships (EHP) is to “increase the availability and utilization of quality health services and explore opportunities to scale up promising and innovative interventions by engaging with new and underutilized local and locally-established organizations.” This includes addressing critical barriers to health interventions in maternal and child health, controlling the HIV/AIDS epidemic, and combatting infectious diseases. Papers for this round should focus on capacity building of local organizations and contribute to information sharing and knowledge management activities.

**Award Size:** USAID anticipates making up to three awards, not to exceed a cumulative total of \$100,000,000 over five years.

Papers for both rounds should address expanding the number of new and underutilized local partners. USAID defines a new partner as “an individual or organization that has not received any funding from the U.S. Agency for International Development (USAID) as a prime partner over the last five years.” An underutilized partner is defined as “an individual or organization that has received less than \$25 million over the past five years from USAID and delivered more total funding in private development assistance than it has received from USAID in financial awards over the past five years.” The organization must also be operating in two or more USAID global health priority countries.

Papers for both rounds should also contribute to USAID’s “Journey to Self-Reliance” strategy, which is focused on supporting developing countries in “their ability to solve their own development challenges,” with the ultimate goal of ending the need for foreign assistance. Papers should also identify which of the four specific forms of partnership is intended, which are listed in the GH APS.

Papers that receive conditional acceptance will be invited for “co-creation,” a way for applicants to work with USAID to address concerns or clarify statements before USAID requests a submission for a full application (if invited). More information on concept paper requirements and submission can be found the specific solicitations for each round.

**Eligibility:** U.S. and non-U.S. public, private, for-profit, and nonprofit organizations, institutions of higher education, public international organizations, and non-governmental organizations are eligible to submit concept papers for each round.

**Due Dates:** Concept papers for Round 1 and 2 are due on **August 2, 2019 at 3:00 pm ET**. Awards are anticipated to start on September 30, 2019.

### *Sources and Additional Information:*

- The GH APS can be found at [www.grants.gov](http://www.grants.gov) under solicitation number “7200AA19APS00013.”
- The call for concept papers for both rounds can be found on [www.grants.gov](http://www.grants.gov) under solicitation number “7200AA19APS00013” in the “Related Documents” tab.
- Lewis-Burke’s analysis of USAID’s NPI launch can be found at [https://www.lewis-burke.com/sites/default/files/agency\\_update\\_-\\_usaid\\_releases\\_new\\_partnerships\\_initiative\\_npi.pdf](https://www.lewis-burke.com/sites/default/files/agency_update_-_usaid_releases_new_partnerships_initiative_npi.pdf).
- More information on how to work with USAID can be found at <https://www.usaid.gov/work-usaid/how-to-work-with-usaid>.

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## **Department of Homeland Security Releases Solicitations for Terrorism Prevention and Counterterrorism Research (TPCR) Center of Excellence**

The Office of University Programs (OUP) within the Department of Homeland Security's (DHS) Science and Technology Directorate (S&T) recently released two solicitations for lead and partner institutions to establish the Terrorism Prevention and Counterterrorism Research (TPCR) Center of Excellence (COE). The COE program is DHS's flagship research account for universities and its awards are highly competitive. The main solicitation seeks a lead institution, on behalf of a contingent of other university, industry, national laboratory, and non-profit partners, to conduct research and development activities as well as training programs focused on avoiding, preventing, or stopping an act of terrorism. In addition, OUP released a separate notice for single project proposals to be considered "partner institutions" to collaborate with the TPCR lead and its identified partners.

DHS COEs are multi-year consortia of research and educational organizations, which work closely with DHS components to research and develop strategies and technologies to address cross-cutting priorities for use by relevant DHS component agencies. COEs are also expected to educate future security technology experts and train current DHS employees on the newest strategies and technologies. TPCR will focus on research "that explores the nature of countering terrorism operations from multiple perspectives including the adversaries' (threat) and that of homeland security stakeholders" (including government officials at all levels and the private sector) to develop technologies and concepts to prevent terror attacks before they begin. The Center will seek to address a wide range of vulnerabilities and gaps in terrorism prevention, and projects will focus on topics including cyber threats, encrypted technology usage, target selection, reporting of suspicious activities, development of big data tools, addressing radicalization patterns and tactics, and practices and programs to ensure a stronger intelligence analyst workforce.

TPCR will be expected to produce use-inspired research and work closely to support the missions of a number of key DHS components that are responsible for identifying and coordinating responses to terrorist threats, as well as state and local prevention agencies. Center leads will be expected to address each of the overarching themes listed below, which are based on critical research and knowledge gaps identified by DHS components (note that DHS does not expect applicants to address every topic within each theme). Applicants must demonstrate a strong understanding of existing studies and approaches relevant to each theme to avoid duplication. Complete descriptions and research questions for the themes are provided in the full solicitations, linked below.

- Theme Area 1: Nature of Counterterrorism Operations
  - Topic Area 1A: Terrorist Tactics, Techniques, and Procedures
  - Topic Area 1B: Cyber and Tech Ops
  - Topic Area 1C: Data Solutions (Including Big Data)
- Theme Area 2: Nationwide Suspicious Activity Reporting Initiative
- Theme Area 3: Terrorism Prevention
  - Topic Area 3A: General Research to Practice
  - Topic Area 3B: Evaluations of Existing Programs
- Theme Area 4: Workforce Development

Research programs supported by this award must have flexibility to adapt to shifting homeland security challenges while maintaining focus on their core areas of emphasis. Given the scope of work required by individual COEs, applicants for lead university must have the capacity to work directly with DHS offices and federal officials to advance the agency's multi-faceted missions over an extended period of time. Applicants also must demonstrate a strong understanding of the translation of technology and new ideas into practice through licensing, coordination with transition partners, and the federal acquisition process. This requires expertise and buy-in across campus, from relevant researchers to university administration, marketing, technology transfer services, and other institutional components.

Applicants for center lead that have previously led a COE are required to provide additional information on their past performance, including outcomes from projects sponsored by the center, previous engagements with federal officials and other stakeholders, and general lessons learned from the experience.

Leads are strongly encouraged to partner with industry, other academic institutions, including historically black colleges and universities (HBCUs), Hispanic-Serving Institutions (HSIs), and/or other minority serving institutions (MSIs); institutions in states that are part of the Experimental Program to Stimulate Competitive Research (EPSCoR); public sector institutions, and non-profit organizations. Center leads will fund partnering institutions through sub-awards.

As previously mentioned, DHS is also soliciting partner universities focused on specific research or workforce development projects to assign to the COE. Principal Investigators that are already partners under a center lead application may not submit the same application for the individual partner solicitation. Applicants for the partner solicitation must focus primarily on one of the key themes listed above.

**Due Dates:** Proposals for both center leads and partners are due on **September 13, 2019 by 11:59 PM EST**. DHS will hold a webinar on August 6 at 3:00 PM EST to provide feedback and answer questions about the solicitations. The webinar may be accessed by phone (Dial: 855-852-7677 Passcode: 5122121) and computer (<https://share.dhs.gov/rwo6kbeg53be/>). A recording will be posted.

**Total Funding and Award Size:** DHS will provide up to \$3.65 million annually for the lead and partners over 10 years. Awardees are expected to be selected by February 3, 2020. Funding is subject to annual congressional appropriations and the results of biennial performance reviews by DHS. Partner projects selected by DHS to become part of the TPCR portfolio are funded through a cooperative agreement with the lead institution, which is responsible for administering funding to all projects within the COE.

DHS will fund up to three additional partner institutions at up to \$500,000 for projects lasting up to two years. DHS may also approach unsuccessful applicants for the center lead competition to serve as partner institutions for the selected COE.

**Eligibility and Limitations:** Applicants for center leads are limited to institutions of higher education. Proposers from academia, industry, or non-profit organizations may submit proposals as a partner organization.

*Sources and Additional Information:*

- The full solicitation for center lead can be found at <https://www.grants.gov/web/grants/view-opportunity.html?oppld=318277>.
- The full solicitation for center partner can be found at <https://www.grants.gov/web/grants/view-opportunity.html?oppld=318279>.
- More information about the COE program can be found at <https://www.dhs.gov/science-and-technology/centers-excellence>.

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