Workforce Development for Teachers and Scientists

Overview

The Workforce Development for Teachers and Scientists (WDTS) program mission is to ensure that DOE has a sustained pipeline for the science, technology, engineering, and mathematics (STEM) workforce. Accomplishing this mission depends on continued support for undergraduate internships, graduate thesis research opportunities, and visiting faculty research appointments; administration of the Albert Einstein Distinguished Educator Fellowship for K–12 STEM teachers for the federal government; and annual, nationwide, middle and high school science competitions culminating in the National Science Bowl® finals in Washington, D.C. These activities support the development of the next generation of scientists and engineers to address the DOE mission, administer programs, and conduct research.

WDTS activities rely significantly on DOE's 17 national laboratories and scientific facilities, which employ more than 30,000 individuals with STEM backgrounds. The DOE laboratory system provides access to leading scientists, world-class scientific user facilities and instrumentation, and large-scale, multidisciplinary research programs unavailable in universities or industry. WDTS leverages these assets to develop and train post-secondary students and educators in support of the DOE mission. WDTS experience-based STEM learning opportunity programs enable highly qualified applicants to conduct research at DOE laboratories and facilities in support of the DOE workforce development mission.

Highlights of the FY 2022 Request

The FY 2022 Request for $35.0 million prioritizes funding for programs that place highly qualified applicants in STEM learning, training, and research experiences at DOE laboratories and expands training opportunities to underrepresented, underserved groups. The Request initiates a new activity, Reaching a New Energy Sciences Workforce (RENEW), which will significantly increase outreach and provide workforce training opportunities to underrepresented and underserved groups, described further below. The Request continues strong support for the undergraduate internships, graduate thesis research, and visiting faculty program to help sustain a skilled workforce pipeline. The Request maintains support for the technology infrastructure development and evaluation activity, which is critically important for sustaining the workforce training programs at DOE laboratories. It also prioritizes support for the DOE National Science Bowl®, a signature STEM competition testing middle and high school students' knowledge in science and mathematics. By encouraging and preparing students to pursue STEM careers, these programs address the DOE's STEM mission critical workforce pipeline needs required to advance science innovation and energy, environment, and national security.

The Office of Science (SC) is fully committed to advancing a diverse, equitable, and inclusive research community. This commitment is key to providing the scientific and technical expertise for U.S. leadership in SC mission areas. Toward that goal, WDTS will participate in the SC-wide RENEW initiative that leverages SC's world-unique national laboratories, user facilities, and other research infrastructures to provide undergraduate and graduate training opportunities for students and academic institutions not currently well represented in the U.S. S&T ecosystem. This includes Minority Serving Institutions (MSIs), and individuals from groups historically underrepresented in STEM, but also includes students from communities with environmental justice impacts and the EPSCoR jurisdictions. The hands-on experiences gained through the RENEW initiative will open new career avenues for the participants, forming a nucleus for a future pool of talented young scientists, engineers, and technicians with the critical skills and expertise needed for the full breadth of SC research activities, including DOE national laboratory staffing.

Description

Activities at the DOE Laboratories

WDTS supports activities such as the Science Undergraduate Laboratory Internships (SULI) program, the Community College Internships (CCI) program, the Visiting Faculty Program (VFP), the Office of Science Graduate Student Research (SCGSR) program, and RENEW. One of the primary goals of these programs is to prepare students to enter STEM careers that are especially relevant to the DOE mission. By providing research experiences at DOE laboratories under the direction of scientific and technical laboratory staff who serve as research advisors and mentors, these activities provide opportunities for participants to engage in research requiring specialized instrumentation; large-scale, multidisciplinary efforts; and/or scientific user facilities. WDTS activities are aligned with the STEM workforce training recommendations of the Federal

Advisory Committees of SC's research program offices, the strategic objectives of the National Science and Technology Council's Committee on STEM Education (CoSTEM) Federal STEM Education 5-Year Strategic Plan, and the Administration's goals for educating and training a diverse and skilled U.S. workforce for the 21st century economy.

SULI places students from two- and four-year undergraduate institutions as paid interns in science and engineering research activities at DOE laboratories, working with laboratory staff scientists and engineers on projects related to ongoing research programs. Appointments are for ten weeks during the summer term and 16 weeks during the fall and spring terms.

CCI places community college students as paid interns in technological activities at DOE laboratories, working under the supervision of a laboratory technician or researcher. Appointments are for ten weeks during the summer, fall, and spring terms.

The VFP goal is to increase the research competitiveness of faculty members and students at U.S. institutions of higher education historically underrepresented in the research community, including Minority Serving Institutions (MSIs). Through direct collaboration with research staff at DOE host laboratories, VFP appointments provide an opportunity for faculty and their students to develop skills applicable to programs at their home institutions; this helps increase the STEM workforce in DOE science mission areas at institutions historically underrepresented within the DOE enterprise. Appointments are in the summer term for ten weeks, and faculty may participate in the program for up to three terms.

SCGSR's goal is to prepare graduate students for STEM careers critically important to the SC mission by providing graduate thesis research opportunities at DOE laboratories. The SCGSR program provides supplemental awards for graduate students to pursue part of their graduate thesis research at a DOE laboratory or facility in areas that address scientific challenges central to the SC mission. U.S. graduate students pursuing Ph.D. degrees in physics, chemistry, materials sciences, non-medical biology, mathematics, computer or computational sciences, or specific areas of environmental sciences aligned with the SC mission, are eligible for research awards to conduct part of their graduate thesis research at a DOE laboratory or facility in collaboration with a DOE laboratory scientist. Research award terms range from three months to one year.

WDTS will participate in the SC-wide RENEW initiative. As a partner of the SC workforce development ecosystem, WDTS will coordinate with SC research programs and DOE national laboratories to develop SC mission research focused training opportunities for undergraduate and graduate students from population groups and academic institutions not currently well represented in the U.S. S&T ecosystem. WDTS will have a unique role to play by significantly expanding SC outreach to students and educators from underrepresented and underserved groups and enabling additional pathways to help them advance along the STEM workforce development pipeline. Initial activities include a proactive, comprehensive effort to understand the barriers that prevent underrepresented and underserved groups from participating in SC workforce development programs. Based on this understanding, strategies and mechanisms will be developed to remove barriers and facilitate participation by underrepresented and underserved groups, including experimenting with new training models or elements to enable participation. Funding will also support DOE national laboratory-based research or technical training experiences for preparing future scientists, technicians, and professionals to support DOE mission needs.

Albert Einstein Distinguished Educator Fellowship

The Albert Einstein Distinguished Educator Fellowship Act of 1994 charges the Department of Energy (DOE) with administering a fellowship program for elementary and secondary school mathematics and science teachers that focuses on bringing teachers' real-world expertise to government to help inform federal STEM education programs. Selected teachers spend 11 months in a Federal agency or a Congressional office. WDTS manages the Albert Einstein Distinguished Educator Fellowship Program for the Federal government. DOE and other Federal agencies support these Fellows. SC sponsors placement opportunities in WDTS and in Congressional offices. Other Federal agencies sponsor placement opportunities in their own offices. Participating agencies include the National Aeronautics and Space Administration, the Library of Congress, the Department of Defense (DOD), the Smithsonian, and the U.S. Geological Survey. The Fellows provide educational expertise, years of teaching experience, and personal insights to these offices to advance Federal science, mathematics, and technology education programs.

National Science Bowl®

The DOE National Science Bowl® is a nationwide academic competition testing students' knowledge in all areas of mathematics and science, including energy. High school and middle school students are quizzed in a fast-paced, question-and-answer format. Approximately 315,000 students have participated in the National Science Bowl® throughout its 30-year history, and it is one of the nation's largest science competitions. SC manages the National Science Bowl®, and sponsors the National Science Bowl® finals competition. Regional competitions rely upon volunteers and are supported by numerous local organizations, both public and private.

The National Science Bowl® regional winning teams receive expenses-paid trips to Washington, D.C. to compete at the National Finals in late April. Competing teams are composed of four students, one alternate, and a teacher who serves as an advisor and coach. SC sponsors the National Science Bowl® finals, and provides central management of its regional events.

In FY 2020, more than 4,950 middle school students (from 613 schools) and 8,660 high school students (from 1,100 schools) participated in 106 regional competitions, with 43 middle school teams (206 students) and 63 high school teams (302 students) advancing to the National Finals that were scheduled to be in Washington, D.C. April 29–May 4, 2020. All 50 U.S. States, the District of Columbia, and Puerto Rico were represented at regionals. More than 5,000 volunteers also participated in the local and national competitions.

The National Science Bowl® Championship Finals are usually held at the Lisner Auditorium, located on the campus of The George Washington University, and feature a live web-streaming broadcast of the event; however, due to the COVID-19 pandemic, the National Finals, including the Championship Finals, were held virtually in early June 2020.

Technology Development and On-Line Application

This activity modernizes on-line systems used to manage application solicitations, review applications, facilitate data collection, perform outreach, and integrate evaluation for WDTS programs. A project to develop, build, and launch new online application and program support systems continues, with evolving new elements that improve accessibility to applicants, advance program oversight and evaluation by WDTS program staff, and allow more efficient management and execution of programs by DOE laboratory staff. An important component of the systems is the ability to support regular evidence-based evaluation of program performance and impact. A phased approach is being used to develop and implement new and improved features. WDTS uses embedded toolsets to improve data-management and to enable quantitative analyses for measuring progress and optimizing program management.

Evaluation

The Evaluation activity supports work to assess whether WDTS programs meet established goals. This is accomplished through the use of triennial reviews of its program performers and of WDTS itself. These reviews are either subject matter program peer reviews, or Federal Advisory Committee commissioned Committee of Visitors reviews, respectively. Additional supported activities that measure and assess program performance involve the collection and analysis of data and other materials, including pre- and post-participation questionnaires, participant deliverables, notable outcomes (publications, presentations, patents, etc.), and longitudinal participant tracking. WDTS is also tracking and reporting how its programs, and activities at DOE labs and SC scientific user facilities, fulfill program goals and objectives.

The Evaluation activity is aligned with the Government Performance and Results Act Modernization Act of 2010, which emphasizes the need for federal programs (including STEM education programs) to demonstrate their effectiveness through rigorous evidence-based evaluation. WDTS works cooperatively with SC programs, other DOE programs, and other federal agencies through CoSTEM to share best practices for STEM program evaluation to ensure the implementation of evaluation processes appropriate to the nature and scale of the program effort.

In support of the RENEW initiative, the knowledge, infrastructure, and capabilities built through the Evaluation activity for the current WDTS programs will be leveraged to help set the goals and craft strategies for assessing the new activities, in coordination with SC research programs and offices.

Outreach

WDTS engages in outreach activities, some in cooperation with other DOE program offices and select federal agencies, to widely publicize its opportunities. The WDTS website is the most widely used tool for prospective program participants to obtain information about WDTS and provides a gateway to accessing the online applications for the WDTS programs. To help diversify the applicant pool, outreach is also conducted via presentations to targeted stakeholder groups, and via the web using virtual webinar meetings that highlight the programs, their opportunities, and the WDTS internship experience. WDTS utilizes SC's social media resources to advertise program opportunities to a broad distribution of stakeholders, including SC research grantees, scientific professional societies, and HBCUs and Other MSIs, with a focus on under-represented and under-served groups. Additional online tools have been implemented to directly publicize opportunities for students via their academic institutional career offices, which is a rapidly expanding outreach modality amongst student populations seeking internship opportunities.

WDTS also annually solicits proposals from DOE host laboratories and facilities to develop and execute outreach activities aimed at recruiting a more diverse spectrum of applicants to WDTS laboratory-based programs, and encouraging the pipeline of WDTS program participants to pursue careers supporting the SC and DOE mission at DOE national laboratories. Emphasis of laboratory outreach activities is on reaching potential applicants who are underrepresented in STEM fields, including targeted outreach to MSIs. Eligible DOE laboratories and facilities are those that host participants in the SULI, CCI, VFP, and/or SCGSR programs. Based upon reported outcomes of annually completed activities, a portfolio of model practices is evolving to help ensure that WDTS activities are fully open and accessible to all eligible students and faculty.

The Laboratory Equipment Donation Program (LEDP) is operated under Outreach and provides excess laboratory equipment to STEM faculty at accredited post-secondary educational institutions. Through the General Services Administration Energy Asset Disposal System, DOE sites identify excess equipment and colleges and universities can then search for equipment of interest and apply via the website. The equipment is free, but the receiving institution pays for shipping costs.

Workforce Development for Teachers and Scientists
Funding

(dollars in thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request	FY 2022 Request vs FY 2021 Enacted
Workforce Development for Teachers and Scientists				
Science Undergraduate Laboratory Internship (SULI)	13,600	13,800	14,000	+200
Community College Internship Program (CCI)	1,700	1,900	2,000	+100
Visiting Faculty Program (VFP)	2,000	1,800	2,100	+300
Office of Science Graduate Student Research (SCGSR) Program	4,500	4,600	5,000	+400
Reaching a New Energy Sciences Workforce (RENEW)	–	–	5,000	+5,000
Internships and Visiting Faculty Activities at DOE Labs	**21,800**	**22,100**	**28,100**	**+6,000**
Albert Einstein Distinguished Educator Fellowship	**1,200**	**1,200**	**1,200**	**–**
National Science Bowl	**2,900**	**2,900**	**2,900**	**–**
Technology Development and On-Line Application	**700**	**700**	**700**	**–**
Evaluation	**600**	**600**	**600**	**–**
Outreach	**800**	**1,500**	**1,500**	**–**
Total, Workforce Development for Teachers and Scientists	**28,000**	**29,000**	**35,000**	**+6,000**

Program Accomplishments

Science Undergraduate Laboratory Internship (SULI) — In FY 2020, approximately 742 placements were supported, of which 0.5 percent were from HBCUs, 13.2 percent from all other MSIs, and approximately 33 percent were women. Among the participants, more than 98 percent reported positive impacts to their educational and career goals, and 99.5 percent would recommend SULI to their peers. As in prior years, participants continue to make notable contributions to research projects as evidenced by co-authorship in peer reviewed journals, patents, and/or presentations at scientific meetings. A new SULI eligibility category called "Recent Graduates" was implemented in the Summer 2019 Term application period, which replaced "Graduating Seniors" and extends the period of eligibility for graduates of 4-year institutions and community colleges to two years (formerly one year) between the date of their undergraduate graduation and the start of the SULI term. This change provides additional experience-based learning opportunities for students considering a STEM research career and addresses recommendations from the 2016 Committee of Visitors review.

Community College Internship Program (CCI) — In FY 2020, 76 placements were supported, with 1.3 percent from Predominantly Black Institution (PBI) and over 40 percent of the participants from all other MSIs. Among the participants, 100 percent would recommend CCI to their peers and nearly 95 percent reported positive impacts to their educational and career goals. All participants reported that they would consider a job or career at their host DOE laboratory or facility.

Visiting Faculty Program (VFP) — In FY 2020, 36 faculty and 17 student placements were supported, and of these participants, at least 15 were women and 27 were from MSIs. Twenty-five percent of faculty and 23.5 percent of students were from HBCUs. All VFP Faculty participants reported a positive impact on their careers, and all expressed interest in continuing their research collaboration. All would recommend VFP to their peers. VFP-Student participants reported receiving a high quality internship experience (96 percent), with 97 percent reporting impacts to their educational and career goals, and 98 percent reporting they would recommend VFP to their peers.

Office of Science Graduate Student Research (SCGSR) Program — In FY 2019, SCGSR added new research areas in disciplines that are not well represented in academic curricula; in high demand, nationally and/or internationally, resulting in difficulties in recruitment and retention at U.S. universities and at DOE laboratories; for which the DOE laboratories may play a role in providing needed workforce development; and needed for the SC workforce. Additionally, the program developed new convergence research areas (e.g. data science, microelectronics, and accelerator science) to address workforce needs for SC's long-range vision on emerging frontiers in science discovery and innovation that increasingly require transdisciplinary approaches. Convergence is a recognized priority in the National Science and Technology Council CoSTEM Federal STEM Education 5-Year Strategic Plan, and it supports the Administration's goals for educating and training an American workforce for the 21st century economy. Based on the feedback received in FY 2019, the new convergence research areas were adjusted for the two application cycles in FY 2020. Since 2014, there have been over 700 SCGSR awardees from 150 institutions across the U.S.

Response to the COVID-19 Pandemic — All WDTS laboratory-based workforce training programs have been continuously offered and supported throughout the COVID-19 pandemic via alternative arrangements. The Spring, Summer, and Fall 2020 Terms of the SULI, CCI, and VFP programs were significantly impacted by restricted access and minimum operations status at DOE national laboratories due to the pandemic. WDTS, in collaboration with DOE national laboratories, delivered virtual summer internships. About 70% of all the internships accepted before the pandemic were successfully executed remotely; the remainder were offered the option of deferring to a later term. During the pandemic, the SCGSR program gave graduate awardees three options: delaying their start dates within a 12-month window of flexibility (normally 4-month window), conducting the research project via a hybrid mode, or modifying the project due to unique circumstances (such as proximity to graduation and family needs). The participants in these WDTS programs, their DOE national laboratory scientist mentors, and the host DOE national laboratories were very positive about the virtual internships and hybrid training experiences.

Reaching a New Energy Sciences Workforce (RENEW) — As part of the preliminary planning for the RENEW initiative, WDTS has started discussions with DOE national laboratories on understanding barriers that prevent underrepresented and underserved groups from participating in WDTS workforce development programs. The effort adopted an evidence-based approach using application data from multiple terms and included a holistic examination of existing practice for recruitment

and selection. The group effort is ongoing and the associated findings will be incorporated into the further development and implementation of the RENEW initiative, including the development of metrics for evaluation.

Albert Einstein Distinguished Educator Fellowship (AEF) — In FY 2020, one of the six WDTS sponsored AEF participants held a WDTS office appointment. As part of the efforts to expand federal agency participation, the 2019-2020 cohort included a placement at the DOD's Naval Surface Warfare Center, and WDTS established partnerships with other agencies that have expressed interest. During the pandemic, the AEF participants of the 2019-2020 cohort engaged with their host federal agencies or Congressional offices remotely and actively participated in the program's professional development activities.

National Science Bowl® — The National Finals of the 30th DOE National Science Bowl® originally scheduled for April 29 – May 4, 2020, in Washington, DC, was changed to a virtual event due to the impact of COVID-19 pandemic. SC provided a virtual competition to support the hundreds of students who had been preparing for the event for many months. The 63 high school and 43 middle school teams who won their Regional Science Bowl events were invited to participate in the DOE SC National Science Bowl® Virtual National Finals. Between May 11 and May 27, each team competed in a Preliminary Round by answering one round of questions. The 32 middle schools and the 32 high schools with the highest scores advanced to the Elimination Tournament. On Saturday, June 4, 2020, the 32 middle school teams that advanced from the Preliminary Round competed for the national championship. On Sunday, June 5, 2020, the 32 high school teams that advanced from the Preliminary Round competed for the National Championship.

Technology Development and On-Line Application — In FY 2020, the technical development performed by the Oak Ridge Institute for Science and Education (ORISE) for a National Science Bowl® alumni website was continued, with support for the National Science Bowl® Travel Portal. Additionally, the technical requirements and information architecture for a virtual National Science Bowl® training site on SC's website started and are under development. Technical requirements for enhancements and features supporting WDTS online systems also include a national virtualized National Science Bowl® scoring system, a national virtualized Cyber Challenge capability developed in coordination with Lawrence Livermore National Laboratory, and integration of toolsets to establish a virtual workspace environment/portal for WDTS program collaboration with its program performers enabling labs to leverage, share, and use participant professional development content and capabilities. Additional development focused on embedded commercial outreach toolsets such as Handshake, and a STEM activity reporting tool with inputs that include event type, sponsorship, targeted audience(s), amplification, and connection to the 2018 CoSTEM 5-Year Plan on STEM Education. This reporting tool provides a central portal for DOE lab points-of-contact enabling facile data collection, management, and archiving in a manner that minimizes burdens of specialized unscheduled data calls to the DOE laboratories.

Evaluation — In FY 2019, WDTS completed a triennial program external peer review of SULI, CCI, and VFP. As in past program peer reviews, labs received individual guidance and feedback on their programs, with findings also used to advance operational baselines through complex-wide discussion and feedback. The peer review criteria, established by WDTS, evaluated whether host institutions are managing and executing SULI, CCI, and VFP through WDTS established Model Practices so that: 1) participants receive best-in-class faculty or intern experiences and, as a result of the program, have increased their preparedness for a STEM career; 2) the activities support DOE's goal "to develop the next generation of scientists and engineers to support Department missions, administer its programs, and conduct the research that will realize the nation's science and innovation agenda"; and 3) the programmatic baseline as defined by the WDTS Core Requirements is being met. The review criteria and inputs also included elements of the 2018 CoSTEM 5-Year Plan on STEM Education, so that the review's outcomes can help guide SC/WDTS when implementing that plan. In FY 2020, WDTS started the planning for a pilot longitudinal study with ORISE. The study is planned for longitudinal evaluation of the impacts of WDTS-sponsored undergraduate internship programs at DOE national laboratories.

Outreach — DOE host laboratories and facilities executed projects aimed at recruiting a more diverse applicant pool to WDTS laboratory-based programs, targeting recruitment of individuals traditionally underrepresented in STEM and addressing needs to increase the applicant pool diversity for one or more of the WDTS programs currently implemented at DOE host laboratories and facilities. As one outcome, a "Mini-Semester" experience that brings prospective applicants from underrepresented communities to DOE laboratories in a week-long immersion experience is proving successful and being adopted by increasing numbers of host labs. In FY 2020, Brookhaven National Laboratory, Oak Ridge National Laboratory,

and the National Renewable Energy Laboratory hosted students during their "Mini-Semesters." A complex-wide virtual career fair was also held during which laboratories were able to access and recruit potential applicants using an online "recruitment booth" presence.

WDTS completed the LEDP online system migration from the Office of Scientific and Technical Information (OSTI) to ORISE that integrates LEDP's equipment catalog, applications, reviews, and processing into WDTS online systems. By using established online resources, and their capabilities, this migration improves the client experience when accessing and applying for equipment, and also improves management and execution of equipment transfer processes. Updates to eligibility and use requirements better align LEDP to SC and DOE workforce mission priorities, as well as improves accountability for the excess donated equipment with the implementation of recipient reporting.

Activities and Explanation of Changes

(dollars in thousands)

FY 2021 Enacted	FY 2022 Request	Explanation of Changes FY 2022 Request vs FY 2021 Enacted
Workforce Development for Teachers and Scientists **$29,000**	**$35,000**	**+$6,000**
Activities at the DOE Laboratories $22,100	$28,100	+$6,000
Science Undergraduate Laboratory Internship (SULI) *$13,800*	*$14,000*	*+$200*
Funding for SULI supports approximately 1,186 students.	The Request for SULI will support approximately 1,203 students.	Funding will support 17 more students.
Community College Internship Program (CCI) *$1,900*	*$2,000*	*+$100*
Funding for CCI supports approximately 167 students.	The Request for CCI will support approximately 176 students.	Funding will support 9 more students.
Visiting Faculty Program (VFP) *$1,800*	*$2,100*	*+$300*
Funding for the VFP supports approximately 62 faculty and 44 students.	The Request for the VFP will support approximately 72 faculty and 52 students.	Funding will support 10 more faculty and 8 more students.
Office of Science Graduate Student Research (SCGSR) Program *$4,600*	*$5,000*	*+$400*
Funding for the SCGSR program supports approximately 180 graduate students. Targeted priority research areas are informed by SC's workforce training needs studies.	The Request for the SCGSR program will support approximately 190 graduate students. Targeted priority research areas will be informed by SC's workforce training needs studies.	Funding will support 10 more graduate students.

(dollars in thousands)

FY 2021 Enacted	FY 2022 Request	Explanation of Changes FY 2022 Request vs FY 2021 Enacted
Reaching a New Energy Sciences Workforce (RENEW) $ —	*$5,000*	*+$5,000*
No funding in FY 2021.	The Request supports the RENEW initiative to provide undergraduate and graduate training opportunities for students and academic institutions not currently well represented in the U.S. S&T ecosystem.	Increase supports the RENEW initiative.
Albert Einstein Distinguished Educator Fellowship $1,200	$1,200	$ —
Funding supports 6 Fellows.	The Request will support 6 Fellows.	No Change.
National Science Bowl® $2,900	$2,900	$ —
Funding provides support to sponsor the virtual finals competition and provides central management of 116 virtual regional events, involving 14,300 students from all fifty states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.	The Request will provide support to sponsor the virtual finals competition and provide central management of 116 virtual regional events, involving 14,300 students from all fifty states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.	No Change.
Technology Development and On-Line Application $700	$700	$ —
Funding continues development and operation of the on-line systems.	The Request will continue development and operation of the on-line systems, and support new development to meet the evolving needs of the programs.	Funding will support new development to meet the evolving needs of the WDTS programs, based on the experiences in response to new circumstances, such as COVID-19 pandemic and supporting remote research participation.
Evaluation $600	$600	$ —
Funding continues support for evaluation activities, including data archiving, curation, and analyses.	The Request will continue support for evaluation activities and studies, including data archiving, curation, and analyses.	The pilot study on longitudinal evaluation will continue and is expected to transition from planning to implementation phase.

(dollars in thousands)

FY 2021 Enacted	FY 2022 Request	Explanation of Changes FY 2022 Request vs FY 2021 Enacted
Outreach $1,500	$1,500	$ —
Funding supports outreach activities to the scientific community targeting Office of Science mission-driven disciplinary workforce needs in the next 5 to 10 years, including additional outreach activity proposal solicitations from DOE host labs and facilities. Support continues for the LEDP program.	The Request will support outreach activity proposal solicitations from DOE host labs and facilities. WDTS will maintain support of activities such as those that promote inclusion and diversity; and/or prioritize recruitment of STEM students to DOE research and development workforce mission-relevant fields of study, and particularly to fields related to SC research programs. Support continues for the LEDP program.	Funding will focus on outreach activity proposals from DOE National Laboratories and facilities that hosted WDTS participants in SULI, CCI, VFP, and SCGSR.

Workforce Development for Teachers and Scientists
Funding Summary

(dollars in thousands)

	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request	FY 2022 Request vs FY 2021 Enacted
Other	28,000	29,000	35,000	+6,000
Total, Workforce Development for Teachers and Scientists	**28,000**	**29,000**	**35,000**	**+6,000**