

Program Direction

Overview

Program Direction (PD) in the Office of Science (SC) supports a highly skilled federal workforce to develop and oversee SC investments in basic research and construction and operation of scientific user facilities, which are critical to the American scientific enterprise. SC research and facility investments transform our understanding of nature and advance the energy, economic, and national security of the United States. In addition, SC accelerates discovery and innovation by providing broad public access to all DOE research and development findings.

SC requires sophisticated and experienced scientific and technical program and project managers, as well as experts in acquisition; finance; legal; construction management; and environmental, safety, and health oversight. The SC basic research portfolio includes extramural grants and contracts supporting over 22,000 researchers located at over 300 institutions and the 17 DOE national laboratories, spanning all 50 states and the District of Columbia. The portfolio of 27 scientific user facilities serves over 32,000 users per year. SC also oversees ten of DOE's 17 national laboratories.

Headquarters (HQ)

The SC HQ includes the six SC research program offices (Advanced Scientific Computing Research, Basic Energy Sciences, Biological and Environmental Research, Fusion Energy Sciences, High Energy Physics, and Nuclear Physics), and the Workforce Development for Teachers and Scientists, Project Assessment, and SBIR/STTR Programs Offices, as well as several resource management functions, and HQ-based field management functions. The SC HQ federal staff:

- Conduct scientific program and research infrastructure planning, execution, and management across SC, in part by extensive engagement with the scientific community to identify research opportunities and develop priorities.
- Establish and maintain competitive research portfolios, which include high-risk, high-reward research, to achieve mission goals and objectives.
- Conduct rigorous external peer review of research proposals and ongoing programs. Each year, SC manages nearly 5,000 ongoing laboratory, university, non-profit, and private industry research awards and conducts over 12,000 peer reviews of new and renewal proposals.
- Provide safety, security, and infrastructure oversight and management of all SC user facilities and other current research investments.
- Provide oversight and management of all line item construction projects and other capital asset projects.
- Provide oversight and management of the maintenance and operational integrity of the ten SC-stewarded national laboratories.
- Provide policy, strategy, and resource management in the areas of laboratory oversight, information technology, grants and contracts, budget, and human capital.

Office of Scientific and Technical Information (OSTI)

OSTI fulfills the Department's responsibilities for providing public access to the unclassified results of its research investments and limited access to classified research results. DOE researchers produce over 50,000 research publications, datasets, software, and patents annually. OSTI's physical and electronic collections exceed one million research outputs from the 1940s to the present, providing access to the results of DOE's research investments. OSTI implements DOE's public access mandates, including the government-wide requirement that peer-reviewed publications resulting from federal funding is made available to the public within 12 months of publication in a journal.

Integrated Support Center (ISC)

The ISC, located at the Chicago and Oak Ridge Offices, provides business management to support SC's federal responsibilities. These functions include legal and technical support; financial management; grant and contract processing; safety, security, and health management; intellectual property and patent management; environmental compliance; facility infrastructure operations and maintenance; and information systems development and support. As part of this, the ISC:

- Monitors the multi-appropriation, multi-program funding allocations for all ten SC national laboratories through administration of laboratory Management and Operating (M&O) contracts and is responsible for over 3,000 financial assistance awards (grants and cooperative agreements) per year to university, non-profit, and small business-based researchers.

- Provides support to SC and other DOE programs for solicitations and funding opportunity announcements, as well as the negotiation, award, administration, and closeout of contracts and financial assistance awards using certified contracting officers and professional acquisition staff.

Site Offices

SC site offices provide contract management and critical support for the scientific mission execution at ten SC national laboratories. This includes day-to-day business management; approvals to operate hazardous facilities; safety and security oversight; leases; property transfers; sub-contracts; and activity approvals required by laws, regulations, and DOE policy. As part of this, the site offices:

- Maintain a comprehensive contract management program to ensure contractual mechanisms are managed effectively and consistently with guidelines and regulations.
- Evaluate laboratory activities including nuclear, radiological, and other complex hazards.
- Provide federal project directors to oversee construction projects and other major capital asset projects.

Highlights of the FY 2020 Request

The FY 2020 Request of \$183,000,000 will support a total level of approximately 797 FTEs. SC will utilize available human capital workforce reshaping tools to manage federal staff in a manner consistent with its long-term workforce restructuring plan as part of the DOE Agency Reform Plan.^a SC will continue to review, analyze, and prioritize mission requirements and identify those organizations and functions aligning with Administration and Department program objectives and SC strategic goals while maximizing efficiency through functional consolidation.

The FY 2020 Request includes:

- Two-hundred and ninety-five (295) SC Headquarters (HQ) federal staff, spread among the six research program offices, Workforce Development for Teachers and Scientists, Project Assessment, and SBIR/STTR Programs Offices, as well as several resource management functions, and HQ-based field management functions.
- The Request includes the transfer of the mission of the New Brunswick Laboratory (NBL) Program Office to National Nuclear Security Administration (NNSA) Defense Programs which better aligns the program office with the NNSA's mission.
- Two (2) FTEs in the DOE Office of Planning and Management Oversight to support the Office of the Under Secretary for Science.
- Twenty-four (24) FTEs in the Office of the Chief Human Capital Officer operating the Shared Service Center (SSC) and supporting HR Advisory Offices.
- Two (2) FTEs supporting the President's Council of Advisors on Science and Technology (PCAST).^b
- Forty (40) OSTI federal staff to manage SC's public access program.
- Four-hundred and thirty-four (434) Integrated Service Center (ISC) and site office federal staff.

^a OMB Memo M-17-22

^b PCAST is required by Executive Order 13539, as amended by Executive Order 13596.

**Science Program Direction
Funding**

(dollars in thousands)

	FY 2018 Enacted	FY 2019 Enacted	FY 2020 Request	FY 2020 Request vs FY 2019 Enacted
Headquarters				
Salaries and Benefits	59,565	58,955	62,655	+3,700
Travel	1,820	2,383	1,944	-439
Support Services	16,761	17,171	16,563	-608
Other Related Expenses	5,379	5,407	5,136	-271
Working Capital Fund	8,250	8,150	8,250	+100
Total, Headquarters	91,775	92,066	94,548	+2,482
Office of Scientific and Technical Information				
Salaries and Benefits	6,216	6,109	5,920	-189
Travel	95	100	105	+5
Support Services	1,931	1,931	1,970	+39
Other Related Expenses	980	980	939	-41
Total, Office of Scientific and Technical Information	9,222	9,120	8,934	-186
Field Offices				
Salaries and Benefits	69,334	69,075	67,743	-1,332
Travel	1,030	1,717	1,425	-292
Support Services	4,972	4,335	3,945	-390
Other Related Expenses	6,667	6,687	6,405	-282
Total, Field Offices	82,003	81,814	79,518	-2,296
Total Program Direction				
Salaries and Benefits	135,115	134,139	136,318	+2,179
Travel	2,945	4,200	3,474	-726
Support Services	23,664	23,437	22,478	-959
Other Related Expenses	13,026	13,074	12,480	-594
Working Capital Fund	8,250	8,150	8,250	+100
Total, Program Direction	183,000	183,000	183,000	—
Federal FTEs	825	810	797	-13

Program Direction

Activities and Explanation of Changes

FY 2019 Enacted	FY 2020 Request	Explanation of Changes FY 2020 Request vs FY 2019 Enacted
Program Direction	\$183,000,000	\$183,000,000
Salaries and Benefits	\$134,139,000	\$136,318,000
		+\$2,179,000
<p>The FY 2019 Enacted Budget supports 810 FTEs to perform scientific oversight, program and project management, essential operations support associated with science program portfolio management, and support for the Office of the Chief Human Capital Officer operating the SSC and supporting HR Advisory Offices.</p> <p>The Enacted Budget supports costs associated with Federal employee benefits, including health insurance costs and retirement allocations in the Federal Employees Retirement System.</p>	<p>The FY 2020 Request will support 797 FTEs to perform scientific oversight, program and project management, essential operations support associated with science program portfolio management, and support for the Office of the Chief Human Capital Officer operating the SSC and supporting HR Advisory Offices.</p> <p>This Request will support costs associated with Federal employee benefits, including health insurance costs and retirement allocations in the Federal Employees Retirement System.</p>	<p>The increase is based on projected payroll requirements in FY 2020 for the requested staffing level of 797 FTEs. The projections take into consideration grade/step levels for the current workforce, the status of current vacancies, and ongoing workforce planning efforts.</p>
Travel	\$4,200,000	\$3,474,000
		-\$726,000
<p>The FY 2019 Enacted Budget supports facility visits where the use of electronic telecommunications are not practical for mandated on-site inspections and facility operations reviews. Ensuring scientific management, compliance, safety oversight, and external review of research funding across all SC programs requires staff to travel, since SC senior program managers are not co-located with grantees or at national laboratories.</p> <p>The FY 2019 Enacted Budget also supports travel for the SC Federal Advisory Committees, which will include over 170 representatives from universities, national laboratories, and industry, representing a diverse balance of disciplines, professional experience, and geography. Each of the six advisory committees provides valuable, independent advice to</p>	<p>The FY 2020 Request will support facility visits where the use of electronic telecommunications are not practical for mandated on-site inspections and facility operations reviews. Ensuring scientific management, compliance, safety oversight, and external review of research funding across all SC programs requires staff to travel, since SC senior program managers are not co-located with grantees or at national laboratories.</p> <p>The Request will also support travel for the SC Federal Advisory Committees, which will include over 170 representatives from universities, national laboratories, and industry, representing a diverse balance of disciplines, professional experience, and geography. Each of the six advisory committees provides valuable, independent advice to the</p>	<p>The decrease is based on projected travel requirements for FY 2020 associated with facility visits, mandatory on-site inspections, and program/project reviews.</p> <p>No change in proposed travel costs for SC Advisory Committees.</p>

FY 2019 Enacted	FY 2020 Request	Explanation of Changes FY 2020 Request vs FY 2019 Enacted
<p>the Department regarding the complex scientific and technical issues that arise in the planning, management, and implementation of SC programs.</p> <p>The FY 2019 Enacted Budget supports the PCAST advisory committee travel.</p>	<p>Department regarding the complex scientific and technical issues that arise in the planning, management, and implementation of SC programs.</p> <p>The Request will support the PCAST advisory committee travel.</p>	<p>The FY 2020 Request includes increased travel for staff supporting the PCAST advisory committee.</p>
<p>Support Services</p>	<p>\$23,437,000</p>	<p>\$22,478,000</p>
<p>The FY 2019 Enacted Budget supports select administrative and professional services including: support for the Small Business Innovation Research/Small Business Technology Transfer program; grants and contract processing and close-out activities; accessibility to DOE’s corporate multi-billion dollar research and development (R&D) program through information systems managed and administered by OSTI; travel processing; correspondence control; select reports or analyses directed toward improving the effectiveness, efficiency, and economy of services and processes; and safeguards and security oversight functions.</p> <p>The FY 2019 Enacted Budget supports essential information technology infrastructure; necessary upgrades to SC’s financial management system; ongoing operations and maintenance of IT systems; and safety management support.</p> <p>The FY 2019 Enacted Budget funds federal staff training and education to maintain appropriate certification and update skills.</p>	<p>The FY 2020 Request will support select administrative and professional services including: support for the Small Business Innovation Research/Small Business Technology Transfer program; grants and contract processing and close-out activities; accessibility to DOE’s corporate multi-billion dollar R&D program through information systems managed and administered by OSTI; travel processing; correspondence control; select reports or analyses directed toward improving the effectiveness, efficiency, and economy of services and processes; and safeguards and security oversight functions.</p> <p>The FY 2020 Request will support essential information technology infrastructure; necessary upgrades to SC’s financial management system; ongoing operations and maintenance of IT systems; and safety management support.</p> <p>The FY 2020 Request will fund federal staff training and education to maintain appropriate certification and update skills.</p>	<p>The decrease is based on projected contract requirements in FY 2020. The Request takes into consideration current contractor staffing levels and management decisions affecting future contract requirements.</p>
<p></p>	<p></p>	<p>-\$959,000</p>

FY 2019 Enacted	FY 2020 Request	Explanation of Changes FY 2020 Request vs FY 2019 Enacted
Other Related Expenses \$13,074,000	\$12,480,000	-\$594,000
The FY 2019 Enacted Budget supports fixed requirements associated with rent, utilities, and telecommunications; building and grounds maintenance; computer/video maintenance and support; IT equipment leases, purchases, and maintenance; and site-wide health care units. It also includes miscellaneous purchases for supplies, materials, and subscriptions.	The FY 2020 Request will support fixed requirements associated with rent, utilities, and telecommunications; building and grounds maintenance; computer/video maintenance and support; IT equipment leases, purchases, and maintenance; and site-wide health care units. It will also include miscellaneous purchases for supplies, materials, and subscriptions.	The decrease will align with projected requirements for FY 2020.
Working Capital Fund \$8,150,000	\$8,250,000	+\$100,000
The FY 2019 Enacted Budget supports the SC contribution to the Working Capital Fund (WCF) for business lines: building occupancy, supplies, printing and graphics, health services, corporate training services, and corporate business systems. Other SC programs also contribute to WCF.	The FY 2020 Request will support the SC contribution to the WCF for business lines: building occupancy, supplies, printing and graphics, health services, corporate training services, and corporate business systems. Other SC programs also contribute to WCF.	The increase will align with projected requirements for FY 2020.

**Supporting Information
Funding**

(dollars in thousands)

	FY 2018 Enacted	FY 2019 Enacted	FY 2020 Request	FY 2020 Request vs FY 2019 Enacted
Headquarters				
Science HQ				
Salaries and Benefits	56,000	55,365	58,695	+3,330
Travel	1,820	2,358	1,744	-614
Support Services	16,761	17,171	16,563	-608
Other Related Expenses	4,579	4,607	4,100	-507
Working Capital Fund	8,250	8,150	8,250	+100
Total, Science HQ	87,410	87,651	89,352	+1,701
Under Secretary for Science				
Salaries and Benefits	440	440	440	—
Other Related Expenses	400	400	400	—
Total, Under Secretary for Science	840	840	840	—
Human Capital Shared Service Center				
Salaries and Benefits	3,125	3,150	3,144	-6
Other Related Expenses	400	400	400	—
Total, Human Capital Shared Service Center	3,525	3,550	3,544	-6
President's Council of Advisors on Science and Technology				
Salaries and Benefits	—	—	376	+376
Travel	—	25	200	+175
Other Related Expenses	—	—	236	+236
Total, President's Council of Advisors on Science and Technology	—	25	812	+787

(dollars in thousands)

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Total Headquarters				
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Travel	1,820	2,383	1,944	-439
Support Services	16,761	17,171	16,563	-608
Other Related Expenses	5,379	5,407	5,136	-271
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Travel	95	100	105	+5
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Other Related Expenses	980	980	939	-41
Total, Office of Scientific and Technical Information	9,222	9,120	8,934	-186
Field Offices				
Chicago Office				
Salaries and Benefits	20,824	21,098	20,305	-793
Travel	200	350	300	-50
Support Services	1,092	759	694	-65
Other Related Expenses	2,329	2,339	2,315	-24
Total, Chicago Office	24,445	24,546	23,614	-932
Oak Ridge Office				
Salaries and Benefits	18,769	17,940	17,640	-300
Travel	232	450	300	-150
Support Services	2,414	2,110	1,976	-134
Other Related Expenses	3,667	3,677	3,428	-249
Total, Oak Ridge Office	25,082	24,177	23,344	-833
Ames Site Office				
Salaries and Benefits	620	628	644	+16
Travel	23	28	30	+2
Support Services	2	2	2	—
Total, Ames Site Office	645	658	676	+18

(dollars in thousands)

	FY 2018 Enacted	FY 2019 Enacted	FY 2020 Request	FY 2020 Request vs FY 2019 Enacted
Argonne Site Office				
Salaries and Benefits	4,032	4,080	3,956	-124
Travel	80	120	95	-25
Support Services	195	195	199	+4
Other Related Expenses	20	20	20	—
Total, Argonne Site Office	4,327	4,415	4,270	-145
Berkeley Site Office				
Salaries and Benefits	3,186	3,222	3,330	+108
Travel	55	46	70	+24
Support Services	215	215	220	+5
Other Related Expenses	105	105	107	+2
Total, Berkeley Site Office	3,561	3,588	3,727	+139
Brookhaven Site Office				
Salaries and Benefits	3,938	3,982	3,864	-118
Travel	70	94	90	-4
Support Services	542	542	341	-201
Other Related Expenses	287	287	294	+7
Total, Brookhaven Site Office	4,837	4,905	4,589	-316
Fermi Site Office				
Salaries and Benefits	2,352	2,380	2,324	-56
Travel	75	131	105	-26
Support Services	42	42	33	-9
Other Related Expenses	28	28	28	—
Total, Fermi Site Office	2,497	2,581	2,490	-91
Oak Ridge National Laboratory Site Office				
Salaries and Benefits	5,145	5,180	4,896	-284
Travel	80	131	105	-26
Support Services	215	215	220	+5
Other Related Expenses	25	25	26	+1
Total, Oak Ridge National Laboratory Site Office	5,465	5,551	5,247	-304

(dollars in thousands)

	FY 2018 Enacted	FY 2019 Enacted	FY 2020 Request	FY 2020 Request vs FY 2019 Enacted
Pacific Northwest Site Office				
Salaries and Benefits	4,752	4,785	4,736	-49
Travel	100	209	160	-49
Support Services	34	34	35	+1
Other Related Expenses	56	56	56	—
Total, Pacific Northwest Site Office	4,942	5,084	4,987	-97
Princeton Site Office				
Salaries and Benefits	1,690	1,710	1,750	+40
Travel	35	78	70	-8
Support Services	15	15	15	—
Other Related Expenses	59	59	60	+1
Total, Princeton Site Office	1,799	1,862	1,895	+33
SLAC Site Office				
Salaries and Benefits	2,178	2,200	2,222	+22
Travel	40	38	50	+12
Support Services	198	198	202	+4
Other Related Expenses	40	40	40	—
Total, SLAC Site Office	2,456	2,476	2,514	+38
Thomas Jefferson Site Office				
Salaries and Benefits	1,848	1,870	2,076	+206
Travel	40	42	50	+8
Support Services	8	8	8	—
Other Related Expenses	51	51	31	-20
Total, Thomas Jefferson Site Office	1,947	1,971	2,165	+194
Total Field Offices				
Salaries and Benefits	69,334	69,075	67,743	-1,332
Travel	1,030	1,717	1,425	-292
Support Services	4,972	4,335	3,945	-390
Other Related Expenses	6,667	6,687	6,405	-282
Total, Field Offices	82,003	81,814	79,518	-2,296

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Support Services	23,664	23,437	22,478	-959
Other Related Expenses	13,026	13,074	12,480	-594
Working Capital Fund	8,250	8,150	8,250	+100
Total, Program Direction	183,000	183,000	183,000	—
Federal FTEs	825	810	797	-13
Technical Support				
System review and reliability analyses	973	973	993	+20
Management Support				
Automated data processing	9,080	9,080	9,262	+182
Training and education	740	740	757	+17
Reports and analyses, management, and general administrative services	12,871	12,644	11,466	-1,178
Total, Management Support	22,691	22,464	21,485	-979
Total, Support Services	23,664	23,437	22,478	-959
Other Related Expenses				
Rent to GSA	637	637	624	-13
Rent to others	1,424	1,424	1,402	-22
Communications, utilities, and miscellaneous	2,653	2,653	2,676	+23
Other services	2,133	2,181	2,373	+192
Operation and maintenance of equipment	2	2	2	—
Operation and maintenance of facilities	1,512	1,512	1,267	-245
Supplies and materials	690	690	703	+13
Equipment	3,975	3,975	3,433	-542
Total, Other Related Expenses	13,026	13,074	12,480	-594
Working Capital Fund	8,250	8,150	8,250	+100

Public Access^a

The Department of Energy's Public Access Plan, issued in July 2014 in response to policy memorandum issued by the White House Office of Science and Technology Policy (OSTP), outlines DOE's model and policy for increasing public access to scholarly publications and digital data resulting from DOE research funding. DOE's enabling authorization and subsequent legislation requires DOE to provide public access to its unclassified R&D results; the DOE Public Access Plan added peer-reviewed, final accepted manuscripts to the types of unclassified scientific and technical information already made publicly accessible as required by these longstanding statutes. For digital data resulting from sponsored research (as defined by OMB Circular A-110), the Plan requires the submission of data management plans with funding proposals to DOE and provides guidelines for preserving and provide access to digital research data as appropriate.

Implementation of the Plan has been carried out through DOE internal agency policy directive, with requirements specified in national labs management & operating contracts and annual performance plans, and in the terms and conditions of DOE financial assistance awards (grants and cooperative agreements). Under the DOE policy, DOE-funded researchers are required to submit metadata and final accepted manuscripts to DOE or to their institutional repositories, and DOE makes these research papers freely accessible to the public within 12 months of publication through the portal DOE PAGES (Public Access Gateway for Energy and Science). DOE's public access model also includes cooperation with the publishing community and with other federal agencies. Since implementation of the DOE policy, DOE is among the top agencies in implementing public access, with DOE PAGES providing free access to 62,000 scholarly publications resulting from DOE research funding. To promote discovery, DOE enables broad indexing of this content by commercial search engines, provides an application programming interface (API) to DOE PAGES, and includes this collection in the cross-agency search portal Science.gov.

^a Responds to the reporting requirement specified by the FY 2018 House Energy and Water Development Appropriations Committee Report 115-230 to provide an update on the DOE Public Access Plan; <https://www.energy.gov/downloads/doe-public-access-plan>; <https://www.osti.gov/public-access-policy>; <https://www.energy.gov/datamanagement/doe-policy-digital-research-data-management>.