#### **Program Direction**

#### Overview

Program Direction (PD) in the Office of Science (SC) supports a skilled Federal workforce to develop and oversee SC investments in basic research and construction and operation of scientific user facilities, the tools of discovery science. SC investments transform our understanding of nature and advance the energy, economic, and national security of the United States. In addition, SC provides broad public access to DOE research and development findings to further leverage the Federal science investment and advance the scientific enterprise.

SC requires highly skilled scientific and technical program and project managers, as well as experts in acquisition; finance; legal; construction and infrastructure management; human resources; and environmental, safety, and health oversight. SC's basic research portfolio includes grants and contracts supporting over 24,000 researchers located at about 300 institutions and 17 national laboratories. SC's scientific user facility portfolio includes 28 in operations and several more under construction—the large machines of modern science—which support some 31,000 users annually. These facilities offer unique capabilities and place U.S. researchers and industries at the forefront of science, technology, and innovation.

In 2013, Secretary Moniz reorganized the Department's management structure, which expanded the role of the Under Secretary for Science to encompass both science and energy. The resulting Office of the Under Secretary for Science and Energy has oversight of SC, as well as the Offices of Fossil Energy (FE), Energy Efficiency and Renewable Energy (EERE), Nuclear Energy (NE), Electricity Delivery and Energy Reliability (OE), Indian Energy Policy and Programs (IE), and the Office of Technology Transitions (OTT). Funding for the permanent career staff reporting to the Office of the Under Secretary for Science and Energy (formally organized as the Office of Planning and Management Oversight) is requested within the SC budget. This office facilitates major initiatives to strategically align the Science and Energy programs and engage its National Laboratories, including the annual National Lab Big Ideas Summit, coordination of the Crosscut programs, and development of seminal documents such as the Quadrennial Technology Review and the Science and Energy Plan. In addition, the office coordinates ongoing operational, planning, budgetary, human resource, and physical and cyber security functions across the program reporting to the Under Secretary.

#### Headquarters (HQ)

SC HQ Federal staff:

- Conduct scientific program and research infrastructure planning, execution, and management across SC, in part by
  engaging the scientific community to identify research opportunities and develop priorities.
- Create and maintain a research portfolio that includes high-risk, high-reward research to achieve mission goals and objectives.
- Conduct rigorous peer review of research proposals and ongoing programs. Each year, SC manages more than 6,000 ongoing laboratory, university, non-profit, and private industry research awards and reviews between 5,000 and 6,000 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 and other construction projects.
- Provide oversight and management of the maintenance and operational integrity of the ten SC national laboratories.
- Provide policy, strategy, and resource management in the areas of information technology, grants and contracts, budget, and human capital.
- Respond to information requests from Congress, the Executive Office of the President, other executive branch offices, and the public.
- Provide subject matter expertise to the Office of the Under Secretary for Science and Energy and other Departmental elements as may be requested.

### Site Offices

SC Site Office Federal staff provide contract management and critical support for the scientific mission 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 assure contractual mechanisms are managed effectively and consistently with guidelines and regulations, supporting over \$3 billion per year of SC mission work.
- Evaluate laboratory activities including nuclear, radiological, and other complex hazards.
- Provide Federal Project Directors to oversee construction projects.

#### 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; human capital shared services; financial management; grant and contract processing; safety, security, and health management; labor relations, intellectual property and patent management; environmental compliance; facility infrastructure operations and maintenance; and information systems development and support. As part of this, the ISC:

- Manages the multi-appropriation, multi-program allotments for all SC national laboratories through administration of laboratory Management and Operating (M&O) contracts and is responsible for over 4,000 grants per year to university-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.
- Manages the DOE Payments Processing Center, a DOE-wide enterprise which executes approximately \$11.1 billion of accounts payable activities annually.

#### Office of Scientific and Technical Information (OSTI):

OSTI fulfills the Department's responsibilities for wide public access to the unclassified and classified results of its research investments. DOE researchers typically produce 30,000-40,000 research papers and reports annually, and OSTI's physical and electronic collections exceed one million research papers and reports. OSTI developed and is responsible for executing DOE's public access mandate consistent with the memorandum issued by the Office of Science and Technology Policy (OSTP) in February 2013. The DOE policy ensures that peer-reviewed publications (either accepted manuscripts or the version of record) resulting from DOE funding will be made available to the public within 12 months from the date of publication. In FY 2015, a subcommittee of the Advanced Scientific Computing Advisory Committee (ASCAC) conducted an initial review of the OSTI program and expressed strong support for DOE's and OSTI's implementation of the public access mandate.

### Highlights of the FY 2017 Budget Request

- The FY 2017 Request of \$204,481,000 is an increase of \$19,481,000 (+10.5%) from the FY 2016 Enacted level and supports a total FTE level of 930.
- Working Capital Fund (WCF) estimates for FY 2017 have increased over the FY 2016 requirements to fund the third year of OMB-mandated OPM credit monitoring and projected inflation increases in existing WCF programs including corporate business systems, building occupancy, interagency transfers, and telecommunications. SC's share of this estimated increase is \$2,872,000, and is included in the Program Direction Budget Request.
- In the FY 2017 Request, most SC research program funding for the Working Capital Fund (WCF) is transferred to PD to establish a consolidated source of funding for goods and services provided by the WCF. CyberOne is still funded through program dollars in the SC Safeguards and Security program. In FY 2016 and prior years, WCF costs were shared by SC research programs and Program Direction. This transfer accounts for an increase of \$10,380,000 in the Program Direction FY 2017 Budget Request.
- The FY 2017 Request includes an increase in travel funding for senior scientific and technical staff. Several recent external Committee of Visitors program management reviews noted that inadequate travel resources for program managers have diminished their participation in major scientific meetings and hindered effective management and oversight of SC's science programs and user facilities. A recent internal review of travel funding for program managers corroborated those findings, revealing a systematic degradation of travel resources over the last decade.

- Consistent with Executive Order 13539, as amended December 19, 2011, the FY 2017 Request supports the President's Council of Advisors on Science and Technology (PCAST), providing \$875,000 for salaries and benefits for three FTEs, committee member travel, meeting planning support, and other related expenses.
- The FY 2017 Request includes \$2,500,000 to support salaries, benefits, travel, training, and other expenses for the ten permanent career FTEs in the Office of Planning and Management Oversight supporting the Office of the Under Secretary for Science and Energy. In FY 2016, funding for this office was requested in the Departmental Administration appropriation.

# Science Program Direction Funding (\$K)

	FY 2015 Enacted	FY 2015 Current	FY 2016 Enacted	FY 2017 Request <sup>1</sup>	FY 2017 vs. FY 2016
Washington Headquarters					1
Salaries and Benefits	51,962	51,776	54,394	56,475	+2,081
Travel	1,866	1,937	2,158	2,200	+42
Support Services	13,472	13,695	14,651	14,000	-651
Other Related Expenses	15,870	14,316	18,112	29,680	+11,568
Total, Washington Headquarters	83,170	81,724	89,315	102,355	+13,040
Office of Scientific and Technical Information					
Salaries and Benefits	6,181	5,882	6,063	6,384	+321
Travel	78	68	120	150	+30
Support Services	1,522	1,180	1,366	2,000	+634
Other Related Expenses	1,000	1,351	855	1,000	+145
Total, Office of Scientific and Technical Information	8,781	8,481	8,404	9,534	+1,130
Field Offices					
Chicago Office					
Salaries and Benefits	22,355	23,037	21,488	22,240	+752
Travel	305	368	248	270	+22
Support Services	800	668	914	661	-253
Other Related Expenses	1,958	2,847	2,275	1,957	-318
Total, Chicago Office	25,418	26,920	24,925	25,128	+203
Oak Ridge Office					
Salaries and Benefits	23,302	23,216	21,600	23,188	+1,588
Travel	300	471	345	386	+41
Support Services	1,469	2,530	1,660	1,354	-306
Other Related Expenses	3,434	3,831	4,025	4,197	+172
Total, Oak Ridge Office	28,505	30,048	27,630	29,125	+1,495

<sup>&</sup>lt;sup>1</sup>\$10,380,000 is transferred from Office of Science research programs to support the Working Capital Fund.

	FY 2015 Enacted	FY 2015 Current	FY 2016 Enacted	FY 2017 Request <sup>1</sup>	FY 2017 vs. FY 2016
Ames Site Office				•	
Salaries and Benefits	441	418	450	462	+12
Travel	24	42	22	25	+3
Support Services	2	0	2	2	0
Total, Ames Site Office	467	460	474	489	+15
Argonne Site Office					
Salaries and Benefits	3,531	3,605	3,496	3,720	+224
Travel	107	106	80	100	+20
Support Services	158	84	165	158	-7
Other Related Expenses	39	25	21	39	+18
Total, Argonne Site Office	3,835	3,820	3,762	4,017	+255
Berkeley Site Office					
Salaries and Benefits	3,465	2,930	2,780	3,360	+580
Travel	75	86	59	65	+6
Support Services	384	486	361	174	-187
Other Related Expenses	131	11	87	131	+44
Total, Berkeley Site Office	4,055	3,513	3,287	3,730	+443
Brookhaven Site Office					
Salaries and Benefits	4,329	4,042	4,140	4,576	+436
Travel	115	135	125	265	+140
Support Services	610	612	358	460	+102
Other Related Expenses	165	72	195	240	+45
Total, Brookhaven Site Office	5,219	4,861	4,818	5,541	+723
Fermi Site Office					
Salaries and Benefits	2,280	2,128	2,325	2,460	+135
Travel	75	52	75	80	+5
Support Services	73	77	55	60	+5
Other Related Expenses	44	20	41	40	-1
Total, Fermi Site Office	2,472	2,277	2,496	2,640	+144

	FY 2015 Enacted	FY 2015 Current	FY 2016 Enacted	FY 2017 Request <sup>1</sup>	FY 2017 vs. FY 2016
New Brunswick Laboratory			•	·	1
Salaries and Benefits	3,575	2,889	2,363	2,793	+430
Travel	80	49	125	165	+40
Support Services	296	1,414	300	489	+189
Other Related Expenses	983	797	1,034	898	-136
Total, New Brunswick Laboratory	4,934	5,149	3,822	4,345	+523
Oak Ridge National Laboratory Site Office					
Salaries and Benefits	5,600	5,402	5,250	5,880	+630
Travel	110	78	100	130	+30
Support Services	281	320	461	430	-31
Other Related Expenses	30	37	30	30	0
Total, Oak Ridge National Laboratory Site Office	6,021	5,837	5,841	6,470	+629
Pacific Northwest Site Office					
Salaries and Benefits	4,641	4,689	4,386	4,726	+340
Travel	125	122	133	140	+7
Support Services	38	27	48	38	-10
Other Related Expenses	104	25	83	104	+21
Total, Pacific Northwest Site Office	4,908	4,863	4,650	5,008	+358
Princeton Site Office					
Salaries and Benefits	1,505	1,328	1,310	1,490	+180
Travel	30	19	38	45	+7
Support Services	10	48	16	14	-2
Other Related Expenses	88	24	44	74	+30
Total, Princeton Site Office	1,633	1,419	1,408	1,623	+215
SLAC Site Office					
Salaries and Benefits	2,052	2,259	2,124	2,160	+36
Travel	59	56	50	59	+9
Support Services	138	151	148	150	+2
Other Related Expenses	57	6	33	57	+24
Total, SLAC Site Office	2,306	2,472	2,355	2,426	+71

	FY 2015 Enacted	FY 2015 Current	FY 2016 Enacted	FY 2017 Request <sup>1</sup>	FY 2017 vs. FY 2016
Thomas Jefferson Site Office			· · · · · · · · · · · · · · · · · · ·		
Salaries and Benefits	1,836	1,759	1,711	1,936	+225
Travel	50	48	60	70	+10
Support Services	49	46	10	10	0
Other Related Expenses	41	3	32	34	+2
Total, Thomas Jefferson Site Office	1,976	1,856	1,813	2,050	+237
Total Field Offices					
Salaries and Benefits	78,912	77,702	73,423	78,991	+5,568
Travel	1,455	1,632	1,460	1,800	+340
Support Services	4,308	6,463	4,498	4,000	-498
Other Related Expenses	7,074	7,698	7,900	7,801	-99
Total, Field Offices	91,749	93,495	87,281	92,592	+5,311
Total Program Direction					
Salaries and Benefits	137,055	135,360	133,880	141,850	+7,970
Travel	3,399	3,637	3,738	4,150	+412
Support Services	19,302	21,338	20,515	20,000	-515
Other Related Expenses	23,944	23,365	26,867	38,481	+11,614
Total, Program Direction	183,700	183,700	185,000	204,481	+19,481
Federal FTEs	940	902	905	930	+25
Technical Support					
Development of specifications	714	464	489	598	+109
System review and reliability analyses	700	701	732	1,192	+460
Surveys or reviews of technical operations	365	443	440	462	+22
Total, Technical Support	1,779	1,608	1,661	2,252	+591
Management Support					
Automated data processing	8,273	7,835	8,665	8,700	+35
Training and education	724	723	802	883	+81
Reports and analyses, management, and general			9,387	8,165	-1,222
administrative services	8,526	11,172	3,307	0,100	-1,222
Total, Management Support	17,523	19,730	18,854	17,748	-1,106
Total, Support Services	19,302	21,338	20,515	20,000	-515

	FY 2015 Enacted	FY 2015 Current	FY 2016 Enacted	FY 2017 Request	FY 2017 vs. FY 2016
Other Related Expenses			_	_	_
Rent to GSA	900	742	1,104	960	-144
Rent to others	1,556	2,516	1,893	1,273	-620
Communications, utilities, and miscellaneous	2,624	1,887	3,223	3,215	-8
Printing and reproduction	21	0	1	0	-1
Other services	1,834	534	2,211	1,148	-1,063
Operation and maintenance of equipment	103	530	143	142	-1
Operation and maintenance of facilities	1,044	2,339	1,333	1,413	+80
Supplies and materials	776	867	689	853	+164
Equipment	3,586	2,450	3,668	3,623	-45
Working Capital Fund	11,500	11,500	12,602	25,854	+13,252
Total, Other Related Expenses	23,944	23,365	26,867	38,481	+11,614

## **Program Direction**

<b>Activities and Explanation of Changes</b>
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FY 2016 Enacted	FY 2017 Request	Explanation of Changes FY 2017 vs. FY 2016
Program Direction \$185,000,000	\$204,481,000	+\$19,481,000
Salaries and Benefits \$133,880,000	\$141,850,000	+\$7,970,000
The FY 2016 Enacted level supports 905 FTEs to perform scientific oversight, project management, essential operations support associated with science program portfolio management, and administration of PCAST.	The FY 2017 Request will support 930 FTEs to perform scientific oversight, project management, essential operations support associated with science program portfolio management, support for the Under Secretary for Science and Energy, and administration of PCAST.	The increase includes funding for salaries and benefits based on current projections for SC's grade distribution and annual pay/step increases. It also includes a \$2,010,000 increase to support ten permanent career FTEs in the Office of Planning and Management Oversight supporting the Office of the Under Secretary for Science and Energy.
This funding also includes support for expenses such as increases in GS schedule pay rates, health insurance costs and retirement allocations in the Federal Employees Retirement System.	This funding also includes support for expenses such as increases in GS schedule pay rates, health insurance costs and retirement allocations in the Federal Employees Retirement System.	
Travel \$3,738,000	\$4,150,000	+\$412,000
Ensuring scientific management, compliance, safety oversight, and external review of research funding across all SC programs requires staff to travel, since SC	Ensuring scientific management, compliance, safety oversight, and external review of research funding across all SC programs requires staff to travel, since SC	The increase in travel funding restores SC program manager participation in major scientific meetings and provide effective management and oversight of major
senior program managers are not co-located with grantees or at national laboratories. Travel is also required for facility visits where the use of electronic telecommunications is not practical for mandated onsite inspections and operations reviews.	senior program managers are not co-located with grantees or at national laboratories. Travel is also required for facility visits where the use of electronic telecommunications is not practical for mandated onsite inspections and operations reviews.	programs and user facilities through on-site visits. Per Administration policy, travel costs were restricted from FY 2013 through 2016.

FY 2016 Enacted	FY 2017 Request	Explanation of Changes FY 2017 vs. FY 2016
	Travel is included to support travel requirements in the Office of the Under Secretary for Science and Energy.	An increase of \$60,000 supports travel for ten permanent career FTEs in the Office of Planning and Management Oversight supporting the Office of the Under Secretary for Science and Energy.
Travel is included to support meetings of the PCAST, scheduled for six times per year with additional meetings called at the discretion of the President. PCAST is an advisory group to the President and Executive Office of the President.	Travel is included to support meetings of the PCAST, scheduled for six times per year with additional meetings called at the discretion of the President. PCAST is an advisory group to the President and Executive Office of the President.	
The Enacted level supports travel for the SC Federal Advisory Committee, which includes 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 Department regarding the complex scientific and technical issues that arise in the planning, management, and implementation of SC programs.	The Request supports travel for the SC Federal Advisory Committee travel, which includes 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 Department regarding the complex scientific and technical issues that arise in the planning, management, and implementation of SC programs.	
Support Services \$20,515,000	\$20,000,000	-\$515,000
Technical expertise and business services sustain the following: maintenance, operation, and cyber security management of SC mission-specific information	Technical expertise and business services sustain the following: maintenance, operation, and cyber security management of SC mission-specific information	Funding for support services is requested based on current projections for SC requirements.
technology systems and infrastructure as well as SC-corporate Enterprise Architecture and Capital Planning Investment Control management; administration of the Small Business Innovation Research/Small Business Technology Transfer program; grants and contract	technology systems and infrastructure as well as SC-corporate Enterprise Architecture and Capital Planning Investment Control management; administration of the Small Business Innovation Research/Small Business Technology Transfer program; grants and contract	This includes an increase of \$55,000 which is requested to support training for ten permanent career FTEs in the Office of Planning and Managemer Oversight supporting the Office of the Under Secreta for Science and Energy.

processing and close-out activities; accessibility to

DOE's corporate multi-billion dollar R&D program

HQ and Field organizations a tool to search and

administered by OSTI; operations and maintenance of

the Searchable Field Work Proposal system to provide

through information systems managed and

processing and close-out activities; accessibility to

DOE's corporate multi-billion dollar R&D program

HQ and Field organizations a tool to search and

administered by OSTI; operations and maintenance of

the Searchable Field Work Proposal system to provide

through information systems managed and

Science/Program Direction

FY 2017 Congressional Budget Justification

FY 2016 Enacted	FY 2017 Request	Explanation of Changes	
	F1 2017 Request	FY 2017 vs. FY 2016	

monitor field work proposals; selected routine administrative services including travel processing and Federal staff training and education to maintain appropriate certification and update skills; select reports or analyses directed toward improving the effectiveness, efficiency, and economy of services and processes; and safeguards and security oversight functions.

monitor field work proposals; selected routine administrative services including travel processing and Federal staff training and education to maintain appropriate certification and update skills; select reports or analyses directed toward improving the effectiveness, efficiency, and economy of services and processes: and safeguards and security oversight functions.

The FY 2016 Enacted funds essential information technology infrastructure, ongoing operations and maintenance of IT systems and safety management support, as well as training for the SC workforce. The FY 2016 Enacted continues to support the IT Modernization Plan.

The FY 2017 Request will fund essential information technology infrastructure, ongoing operations and maintenance of IT systems and safety management support, as well as training for the SC workforce. The FY 2017 Request will continue to support the IT Modernization Plan.

#### Other Related Expenses \$26,867,000

#### \$38,481,000 +\$11,614,000

The FY 2016 Enacted includes \$14,265,000 for requirements not funded through the Department's Working Capital Fund (WCF). This includes fixed requirements in the Field Offices associated with rent, utilities, and telecommunications, building and grounds maintenance, computer/video maintenance and support, equipment leases, purchases, maintenance, and site-wide health care units. It also includes SC-wide assessments for payroll processing and the Corporate Human Resource Information System.

The FY 2017 Request includes \$12,627,000 for requirements not funded through the Department's Working Capital Fund (WCF). This includes fixed requirements in the Field Offices associated with rent, utilities, and telecommunications, building and grounds maintenance, computer/video maintenance and support, equipment leases, purchases, maintenance, and site-wide health care units. It also includes SC-wide assessments for payroll processing and the Corporate Human Resource Information System.

The increase is for other related expenses (non-WCF) based on current projections for SC requirements.

This includes an increase of \$75,000 which is requested to support IT requirements for ten permanent career FTEs in the Office of Planning and Management Oversight supporting the Office of the Under Secretary for Science and Energy.

FY 2016 Enacted	FY 2017 Request	Explanation of Changes FY 2017 vs. FY 2016
The FY 2016 Enacted level includes \$12,602,000 to support the SC contribution to the WCF. The WCF provides for common administrative services at HQ including: rent and building operations, telecommunications, network connectivity, supplies, printing/graphics, mail, purchase card surveillance, health centers, interagency transfers associated with E-gov initiatives and costs for staff administering the WCF.	The FY 2017 Request includes \$25,854,000 to support the SC contribution to the WCF. The WCF provides for common administrative services at HQ including: rent and building operations, telecommunications, network connectivity, supplies, printing/graphics, mail, purchase card surveillance, health centers, interagency transfers associated with E-gov initiatives, procurement management, iManage, A-123 internal control, pension studies, financial statement audits, overseas presence, OPM credit monitoring, and costs for staff administering the WCF.	Increased funding of \$13,252,000 supports WCF requirements. This includes \$10,380,000 which is transferred to PD from the SC research programs in the FY 2017 Request for a consolidated source for most of the WCF. CyberOne is still funded in the Safeguards and Security program.
WCF costs represent 47% of the Other Related Expenses Request and is an estimate based on projected usage.	WCF costs represent 67% of the Other Related Expenses Request and are based on CFO estimates.	The increase also includes \$300,000 which is requested for WCF requirements associated with ten permanent career FTEs in the Office of Planning and Management Oversight supporting the Office of the Under Secretary for Science and Energy.