## **Science Program Direction**

# **Funding Profile by Category**

(dollars in thousands/whole FTEs)

	FY 2008 Current Appropriation	FY 2009 Original Appropriation	FY 2009 Additional Appropriation <sup>a</sup>	FY 2010 Request
Science Program Direction				
Salaries and Benefits	129,428	138,781	_	155,924
Travel	3,811	4,618	_	5,227
Support Services	22,815	19,018	+1,100	24,306
Other Related Expenses	21,725	24,278	+500	28,265
Total, Science Program Direction	177,779	186,695	+1,600	213,722
Full Time Equivalents <sup>bc</sup>	981	1,066	_	1,149

## **Program Overview**

### Mission

The mission of the Science Program Direction (SCPD) program is to provide and sustain a skilled and motivated Federal workforce to provide oversight for taxpayer dollars used to support energy and science-related investments for the Office of Science (SC). The SC workforce is responsible for overseeing taxpayer dollars for science program development; implementation and execution; and operation, administrative, business, technical, and program management. Through the Office of Scientific and Technical Information (OSTI), the SC workforce aids in providing access to the DOE's research and development (R&D) results.

### **Background**

The increased attention to energy independence, nuclear security, scientific discovery and innovation, and environmental protection has and will continue to impact the SC in dramatic ways. The SC directly funds, oversees, and manages science programs that focus on research in global climate change, environmental improvements, electrical energy storage, advanced nuclear fuel cycle, fusion energy sources, matter and energy components, and the evolution of nuclear matter.

<sup>&</sup>lt;sup>a</sup> The Additional Appropriation column reflects the planned allocation of funding from the American Recovery and Reinvestment Act of 2009, P.L. 111–5. See the Department of Energy Recovery website at http://www.energy.gov/recovery for up-to-date information regarding Recovery Act funding.

<sup>&</sup>lt;sup>b</sup> FY 2008 data for Full Time Equivalent (FTE) employment reflects actual usage, whereas FY 2009 and FY 2010 reflect FTE ceilings. The FY 2008 FTE ceiling, based on the FY 2008 appropriation and as reflected in the FY 2009 Budget Request to Congress, was 1,058. Actual usage was lower than the ceiling in FY 2008 due primarily to deferred backfills of vacancies and other hiring due to uncertainty over the timing and levels of FY 2008 and FY 2009 appropriations. The FY 2009 appropriation includes the transfer of 8 FTEs from the Office of Nuclear Energy, so the FY 2009 FTE ceiling is flat at 1,066. <sup>c</sup> Responsibility for the New Brunswick Laboratory was transferred in FY 2008 to SC from the former Office of Security and Safety Performance Assurance. Therefore all FY 2008 funding (\$6,644,000) and FTEs (28) are reflected in SC. However, 9 of the 28 FTEs are reflected in the Other Defense Activities appropriation account in the Appendix volume of the President's budget.

The SC workforce is essential to the future of energy and scientific advances. With an experienced workforce, SC effectively administers and accomplishes its individual program goals. As a result, SC effectively aids in achieving DOE goals and the goals of the Nation.

- The SC Headquarters (HQ) Federal workforce is responsible for SC-wide issues, oversight, and scientific program development and management across a broad spectrum of scientific disciplines and program offices. Working in collaboration with the laboratory and university communities, the SC HQ Federal staff makes a major contribution by setting the policies and direction for DOE science investment and providing oversight of that investment.
- Field personnel are responsible for implementing the SC program within the framework established by HQ policy, direction, and guidance. Site Office staff, located at each of the ten SC laboratories, are responsible for the day-to-day oversight of over \$3 billion per year management and operating contract performance of the SC laboratories.
- The Integrated Support Center (ISC) provided by staff at the Chicago and Oak Ridge (OR) Offices offer administrative, business, and technical support across the entire SC enterprise. These operations include field support in areas such as financial management; human resources (HR); grant and contract processing; safety, security, and health management; labor relations, intellectual property and patent management; environmental compliance; infrastructure operations maintenance; and information systems development and support.
- Federal staff at OSTI fulfills the Department's legislative mandate to provide public access to the unclassified results of DOE's research programs. OSTI also collects, protects, and provides secure access to DOE's classified research outcomes. Recognizing that science research is also performed in other federal agencies and, indeed, at counterpart organizations around the world, OSTI has built broad collaborations both within the U.S. and internationally to enable a single point of access to nearly 400 million pages of scientific information. Within the U.S., Science.gov offers simultaneous searching of federal science databases and websites, while WorldWideScience.org performs the same functionality across the R&D results of over 50 countries. By facilitating and accelerating access to such information, SC is accelerating scientific discovery itself.

In order to meet the increasing workload and expectations of its science programs, it is essential to ensure the SC is adequately staffed and balanced with appropriate skills, education, and experience. SC will complete a comprehensive Workload/Workforce Analysis Study that will indentify workload indicators and their relationship to staffing requirements and budget allocations. This study will include an examination of current workforce demographics, statistical trends over time, forecasts for projecting attrition and retirement, and best practice comparisons to similar science agencies.

#### **Benefits**

Society and the American economy will benefit tremendously from a safe and enduring energy future. To accomplish this, SC programs must continue to administer their scientific projects that focus on these developments. In order for SC programs to function effectively, SCPD must provide and fund an adequate staff and management for its science programs. As a result, SCPD's contribution to the SC mission will ultimately move our society closer to these fundamental changes in energy and science.

### **Budget Overview**

The FY 2010 budget request fully supports and provides for a federal workforce with the capability to manage the significantly increased investment in energy and science-related research. The FY 2010 request includes salaries, benefits, travel, training, and associated expenses for 1,149 full time equivalents (FTEs), an increase of 83 FTEs or an 8% increase over the FY 2009 FTE ceiling of 1,066.

The increased SC research, construction, and general plant project funding in FY 2009 and FY 2010 creates a substantial workload across numerous workforce areas, including but not limited to grants, contracts, finance, legal, construction and infrastructure management, and environment, safety, and health (ES&H) as well as significant management, oversight, and reporting challenges across the complex.

Total SC funding has grown \$1,140,592,000, an annualized growth rate of 9.5% from FY 2006 to FY 2009. In contrast, SCPD funding increased at an annualized growth rate of 5.4% (\$27,577,000). The average research portfolio of a HQ Program Manager is estimated to increase 52.9% during FY 2009. The FY 2010 budget request increases SC funding an additional \$169,364,000, which results in an 8.0% annualized growth from FY 2006 to FY 2010. The increase to the SCPD FY 2010 request is \$27,027,000 that results in a 7.7% annualized growth from FY 2006 through FY 2010, comparable to the overall growth of the SC program and a growth driven by the increased taxpayer investment in energy and science research and Administration goals and priorities. Staffing shortages in the HQ Program Offices have been previously identified; since FY 2002, 17 Committee of Visitors (COV) reports have cited the need for additional Program Managers and support staff at HO for virtually all Program Offices. SC HQ Program and Project Managers also assist other DOE technology programs with merit and project reviews. Grant and contract awards are estimated to increase by more than 40% over FY 2008, placing significant demands on the current acquisition workforce at HQ and the Field. Increased funding allotments and accelerated execution of those allotments will place greater financial management and accountability responsibilities on program, budget, financial, and accounting offices across the complex. Additional construction projects and general plant projects will require greater project management and facility and safety oversight. These are but a few of the challenges facing the current SC workforce.

Since FY 2007, the onboard SC federal workforce has grown from 968 to 990, or 2.3%. This slow growth rate is primarily due to deferred backfills of vacancies and other deferred hiring due to uncertainties related to the SCPD FY 2008 and FY 2009 appropriations. The increasing need for federal management, transparency, professional business operations, and highly skilled project management requires both an increased workforce and a SCPD budget that keeps pace with growth in science program funding. For that reason, SC plans to hire up to the FY 2009 FTE ceiling level of 1,066, which is the same as the FY 2008 FTE ceiling of 1,058, accounting for the 8 FTEs transferred from the DOE Office of Nuclear Energy in FY 2009, as reflected in the FY 2009 President's Request to Congress.

The SC succession planning has been impacted by the decreased FY 2008 and FY 2009 SCPD appropriations. The average age of current SC employees is 51 years old and 301 employees (31%) are eligible for voluntary retirement by FY 2010. The requested growth in SCPD appropriations will allow SC to effectively plan for retirements, replenish critical positions, and provide an adequate and appropriately skilled workforce to meet SC goals and missions.

#### **Detailed Justification**

(dollars in thousands)

FY 2008	FY 2009	FY 2010
129,428	138,781	155,924

#### **Salaries and Benefits**

Salaries and benefits funding for FY 2010 supports 1,149 Federal FTEs: 431 FTEs at HQ, which includes employees based in Germantown, Maryland, and Washington, DC; and 718 FTEs at the Site offices and the ISC, which includes employees located throughout the U.S.

### (dollars in thousands)

FY 2008	FY 2009	FY 2010

The 83 additional new FTEs requested in FY 2010 include:

- 53 additional Program Manager and support staff FTEs for the SC HQ Program Offices to ensure that the necessary resources and infrastructure exists to facilitate sound scientific program development, management, oversight, and reporting of a significantly increased SC research program. These additional FTEs will address staffing concerns cited in 17 COV reports since FY 2002, as well as address succession planning and development.
- 30 additional staff FTEs across the SC Field complex will ensure that acquisition (grants and contracts), financial, HR, legal, health, safety, security, facilities management, and other necessary infrastructure is in place to fully support the SC enterprise, ensure contractor oversight, and address succession planning and development.

Strategically deployed recruitment, relocation, and retention bonuses will be employed corporately to attract and retain technically skilled and highly qualified employees.

Travel 3,811 4,618 5,227

Travel includes all transportation, subsistence, and incidental travel expenses of SC's Federal employees and Advisory Committee members in accordance with Federal Travel Regulations. Funding is also included for travel costs associated with permanent change of station (PCS).

Federal staff travel is required to effectively manage a broad spectrum of scientific disciplines and perform contractor oversight at geographically dispersed facilities. The purpose is to ensure implementation of DOE orders and regulatory requirements, and includes attendance at site, project, and program reviews; internal audits, compliance reviews, and oversight of investigations and administrative proceedings; operational policy and process reviews and meetings; conferences; and training for skill maintenance and/or certification.

The request also includes travel expenses for over 150 members making up the six individual SC advisory committees. Committee membership primarily consists of representatives from universities, national laboratories, and industry and includes a diverse balance of disciplines, experiences, and geography. Each of the six advisory committees meets three to four times annually and provides valuable, independent advice to the Department regarding the complex scientific and technical issues that arise in the planning, management, and implementation of the SC programs.

Support Services 22,815 19,018 24,306

Support services includes contracts to provide both technical expertise and general administrative services and activities as follows:

- Maintenance, operation, and cyber security management of SC HQ, OSTI, and the field mission-specific information management systems and infrastructure and SC-corporate Enterprise Architecture and Capital Planning Investment Control management. Provides for a one-time upgrade to the Energy Sciences Network (ESnet).
- Accessibility to DOE's multi-billion dollar R&D program through E-Gov information systems managed and administered by OSTI.
- Operations and maintenance of the Searchable Field Work Proposal (FWP) system to provide HQ and Field organizations a tool to search, evaluate, and monitor both legacy and current FWPs.

(dollars in thousands)

FY 2008	FY 2009	FY 2010

- Day-to-day operations, including mailroom services, travel processing, administration of the Small Business Innovation Research (SBIR) program, grants and contract close-out activities, copy centers, directives coordination, and filing and retrieving records.
- Training and education of federal staff, including continuing education and career development training.
- Reports or analyses directed toward improving the effectiveness, efficiency, and economy of management and general administrative services.
- Staffing for 24-hour emergency communications centers and safeguards and security (S&S) oversight functions.
- Energy research analysis, studies, and activities relevant to DOE's energy and science missions.

# **Other Related Expenses**

21,725

24,278

28,265

Other related expenses provides funding for SC's contributions to the Working Capital Fund (WCF) established at DOE HQ to allocate the costs of common Departmental HQ administrative services to the recipient organizations. Services provided include rent and building operations, telecommunications (telephone services), network connectivity, supplies/equipment, printing/graphics, photocopying, mail and postage, contract closeout and purchase card surveillance; operation and maintenance of the Standard Accounting and Reporting System (STARS), and the Strategic Integrated Procurement Enterprise System (STRIPES); contractor support for the Payments Processing Center at the OR Financial Service Center; and Office of Management and Budget Circular A-123 reporting requirements support.

WCF services assessed to and used by both HQ and the Field include the following:

- Online corporate training services
- Payroll processing
- Corporate Human Resource Information System (CHRIS)
- Project Management Career Development Program (PMCDP)

Expenses in the Field include fixed requirements associated with rent, utilities, and telecommunications and are paid directly, as are requirements such as building and grounds maintenance, computer/video maintenance and support, printing and graphics, copier leases, site-wide health care units, and equipment.

Storage of household goods and the buying/selling of homes in conjunction with directed PCS moves are included for HQ and the field as well as E-Gov fees for various initiatives such as the Integrated Acquisition Environment and E-Travel.

**Total, Science Program Direction** 

177,779

186,695

213,722

## **Explanation of Funding Changes**

FY 2010 vs. FY 2009 (\$000)

#### **Salaries and Benefits**

Provides support for a net increase of 83 FTEs over FY 2009. Most of these new hires are assumed to be onboard by early to mid-FY 2010. Assumes a 2.0% pay raise for 2010; 5.1% escalation for personnel/pay related activities such as benefits for health insurance and retirement; and an increased cap for Senior Executive Service basic pay.

+17,143

### **Travel**

Provides support for travel requirements related to additional Program Managers and increased program management oversight of a significantly increased SC research portfolio at HQ (+\$408,000); increased travel requirements by technical and administrative staff supporting acquisitions, finance, ES&H, and training certifications and qualifications (+\$201,000).

+609

## **Support Services**

Maintains current level of support services for maintenance, operation, and increased cyber security management of SC HQ mission-specific information management systems and infrastructure and energy research analyses and studies (+\$911,000); and supports a one-time upgrade to the ESnet (+\$343,000).

The increase also maintains current level of management support services (+\$1,727,000) in the field to include technical support for Documented Safety Analyses and occupational medicine, S&S oversight services; safety related projects, health physics, emergency operations, criticality support, financial reviews of SBIR proposals, statistical support, and administrative support such as mail and file services and security processing/declassification; maintains current level of information technology (IT) support (+\$2,349,000); and supports training requirements for current staff (+\$288,000).

Offsetting the increases are decreases to development costs associated with the Searchable FWP (-\$160,000) and allocation of training support costs by lead Program Secretarial Office (SC-OR Office) to the user (Office of Environmental Management) (-\$170,000).

+5,288

### **Other Related Expenses**

Supports increases in the WCF related to space, communications, utilities, supplies, and other non-WCF services to support the additional FTEs to be hired in FY 2010 (+\$2,094,000); and HQ IT operations and maintenance and purchase of equipment, including equipment related to a one-time upgrade to the ESnet (+\$227,000). The increase also maintains the current level of Field and Site Office other services and fixed requirements such as building operations, utilities, communications, etc. (+\$1,613,000); and technology refresh/update of Site Office IT equipment (+\$53,000).

+3.987

## **Total Funding Change, Science Program Direction**

+27,027

# **Supporting Information**

# **Operating Expenses, Capital Equipment and Construction Summary**

(dollars in thousands)

	FY 2008	FY 2009	FY 2010
Operating Expenses	177,579	186,695	213,722
Capital Equipment	200	_	_
Total, Science Program Direction	177,779	186,695	213,722

# **Funding Profile by Category by Site**

FY 2008	FY 2009	FY 2010
49,919	47,445	56,659
2,283	2,872	3,268
10,292	9,911	11,220
10,892	12,997	15,459
73,386 <sup>a</sup>	73,225	86,606
312 <sup>a</sup>	321	374
_	6,571	6,673
_	84	86
_	1,207	1,103
_	1,054	1,054
_	8,916	8,916
a	57	57
21,989	25,253	26,326
393	425	541
2,536	471	4,019
1,798	688	2,714
26,716	26,837	33,600
187	197	204
	2,283 10,292 10,892 73,386 <sup>a</sup> 312 <sup>a</sup> — — — — — — a  21,989 393 2,536 1,798 26,716	49,919       47,445         2,283       2,872         10,292       9,911         10,892       12,997         73,386a       73,225         312a       321         —       6,571         —       84         —       1,207         —       1,054         —       8,916         —a       57         21,989       25,253         393       425         2,536       471         1,798       688         26,716       26,837

<sup>&</sup>lt;sup>a</sup> Starting in FY 2009, OSTI is a separate line. FY 2008 OSTI amounts are \$9,220,000 and 55 FTEs and non-OSTI HQ amounts are \$64,166,000 and 257 FTEs.

	FY 2008	FY 2009	FY 2010
Oak Ridge Office			
Salaries and Benefits	30,964	32,116	30,168
Travel	498	695	536
Support Services	7,122	6,246	6,192
Other Related Expenses	4,690	5,891	5,409
Total, Oak Ridge Office	43,274 <sup>a</sup>	44,948 <sup>a</sup>	42,305
Full Time Equivalents	296 <sup>a</sup>	291 <sup>a</sup>	261
Ames Site Office			
Salaries and Benefits	489	503	585
Travel	21	25	28
Support Services	22	33	5
Other Related Expenses	55	39	_
Total, Ames Site Office	587	600	618
Full Time Equivalents	4	4	4
Argonne Site Office			
Salaries and Benefits	3,377	3,476	4,194
Travel	21	47	49
Support Services	208	190	56
Other Related Expenses	595	215	
Total, Argonne Site Office	4,201	3,928	4,299
Full Time Equivalents	23	24	28

\_

<sup>&</sup>lt;sup>a</sup> Starting in FY 2010, the Oak Ridge National Laboratory Site Office (ORNLSO) is proposed as a separate line. In FY 2008 and FY 2009, ORNLSO funding is included within Oak Ridge (OR) Office funding. FY 2008 ORNLSO amounts are \$3,344,000 and 22 FTEs, and OR amounts are \$39,930,000 and 274 FTEs. FY 2009 ORNLSO amounts are \$4,357,000 and 31 FTEs, and OR amounts are \$40,591,000 and 260 FTEs.

	FY 2008	FY 2009	FY 2010
Berkeley Site Office	L	1	
Salaries and Benefits	3,326	3,748	4,234
Travel	79	107	87
Support Services	787	68	103
Other Related Expenses	452	39	143
Total, Berkeley Site Office	4,644	3,962	4,567
Full Time Equivalents	21	25	27
Brookhaven Site Office			
Salaries and Benefits	3,444	3,714	4,606
Travel	87	_	110
Support Services	190	_	360
Other Related Expenses	574	_	360
Total, Brookhaven Site Office	4,295	3,714	5,436
Full Time Equivalents	22	27	29
Fermi Site Office			
Salaries and Benefits	2,162	2,240	2,494
Travel	54	54	63
Support Services	62	76	80
Other Related Expenses	234	46	58
Total, Fermi Site Office	2,512	2,416	2,695
Full Time Equivalents	15	15	17
New Brunswick Laboratory			
Salaries and Benefits	3,541	3,392	4,478
Travel	131	73	55
Support Services	1,079	327	518
Other Related Expenses	1,893	2,791	1,930
Total, New Brunswick Laboratory	6,644	6,583	6,981
Full Time Equivalents	28	29	35

		ars in thousands, whole i	
	FY 2008	FY 2009	FY 2010
Oak Ridge National Laboratory Site Office			
Salaries and Benefits	_	_	3,982
Travel	_	_	64
Support Services	_	_	333
Other Related Expenses	_	_	60
Total, Oak Ridge National Laboratory Site Office	a	b	4,439
Full Time Equivalents	b	b	31
Pacific Northwest Site Office			
Salaries and Benefits	4,769	4,671	5,062
Travel	137	65	159
Support Services	147	75	110
Other Related Expenses	133	453	819
Total, Pacific Northwest Site Office	5,186	5,264	6,150
Full Time Equivalents	35	35	38
Princeton Site Office			
Salaries and Benefits	1,615	1,691	1,920
Travel	_	35	45
Support Services	1	_	12
Other Related Expenses	224	_	78
Total, Princeton Site Office	1,840	1,726	2,055
Full Time Equivalents	12	12	13
Stanford Site Office			
Salaries and Benefits	2,195	2,224	2,556
Travel	53	61	56
Support Services	142	402	157
Other Related Expenses	109	61	61
Total, Stanford Site Office	2,499	2,748	2,830
Full Time Equivalents	14	16	16

<sup>&</sup>lt;sup>a</sup> Starting in FY 2010, Oak Ridge National Laboratory Site Office (ORNLSO) is proposed as a separate line. In FY 2008 and FY 2009, ORNLSO funding is included within the Oak Ridge (OR) Office funding. FY 2008 ORNLSO amounts are \$3,344,000 and 22 FTEs, and OR amounts are \$39,930,000 and 274 FTEs. FY 2009 ORNLSO amounts are \$4,357,000 and 31 FTEs, and OR amounts are \$40,591,000 and 260 FTEs.

	FY 2008	FY 2009	FY 2010
Thomas Jefferson Site Office			
Salaries and Benefits	1,638	1,737	1,987
Travel	54	75	80
Support Services	227	12	38
Other Related Expenses	76	4	120
Total, Thomas Jefferson Site Office	1,995	1,828	2,225
Full Time Equivalents	12	13	15
<b>Total Field Offices</b>			
Salaries and Benefits	79,509	84,765	92,592
Travel	1,528	1,662	1,873
Support Services	12,523	7,900	11,983
Other Related Expenses	10,833	10,227	11,752
Total, Field Offices	104,393	104,554	118,200
Full Time Equivalents	669	688	718
Total SCPD			
Salaries and Benefits	129,428	138,781	155,924
Travel	3,811	4,618	5,227
Support Services	22,815	19,018	24,306
Other Related Expenses	21,725	24,278	28,265
Total, SCPD	177,779	186,695	213,722
Full Time Equivalents <sup>ab</sup>	981	1,066	1,149

<sup>&</sup>lt;sup>a</sup> FY 2008 data for Full Time Equivalent (FTE) employment reflects actual usage, whereas FY 2009 and FY 2010 reflect FTE ceilings. The FY 2008 FTE ceiling, based on the FY 2008 appropriation and as reflected in the FY 2009 Budget Request to Congress, was 1,058. Actual usage was lower than the ceiling in FY 2008 due primarily to deferred backfills of vacancies and other hiring due to uncertainty over the timing and levels of FY 2008 and FY 2009 appropriations. The FY 2009 appropriation includes the transfer of 8 FTEs from the Office of Nuclear Energy, so the FY 2009 FTE ceiling is flat at 1,066. <sup>b</sup> Responsibility for the New Brunswick Laboratory was transferred in FY 2008 to SC from the former Office of Security and Safety Performance Assurance. Therefore all FY 2008 funding (\$6,644,000) and FTEs (28) are reflected in SC. However, 9 of the 28 FTEs are reflected in the Other Defense Activities appropriation account in the Appendix volume of the President's budget.

# **Support Services by Category**

(dollars in thousands)

	FY 2008	FY 2009	FY 2010
Technical Support			1000
Development of Specifications	520	258	146
System Definition	356	192	183
System Review and Reliability Analyses	520	510	521
Total, Technical Support	1,396	960	850
Management Support			
Automated Data Processing	10,651	5,541	9,339
Training and Education	716	1,053	1,270
Reports and Analyses Management and General Administrative Services	10,052	11,464	12,847
Total, Management Support	21,419	18,058	23,456
Total, Support Services	22,815	19,018	24,306

# **Other Related Expenses by Category**

(dollars in thousands)

	FY 2008	FY 2009	FY 2010
Other Related Expenses			
Rent to GSA	242	810	825
Rent to Others	_	614	460
Communications, Utilities, and Miscellaneous	1,943	2,083	2,355
Printing and Reproduction	27	17	96
Other Services	6,230	6,900	7,239
Operation and Maintenance of Equipment	664	1,040	1,331
Operation and Maintenance of Facilities	2,123	1,930	2,071
Supplies and Materials	1,731	661	1,479
Equipment	2,140	1,729	1,804
Working Capital Fund	6,625	8,494	10,605
Total, Other Related Expenses	21,725	24,278	28,265