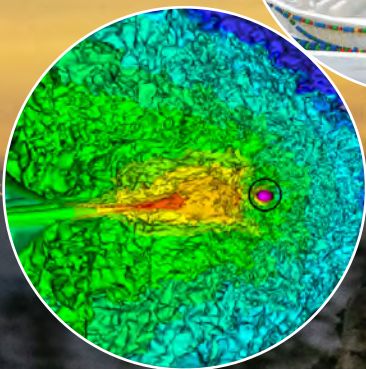
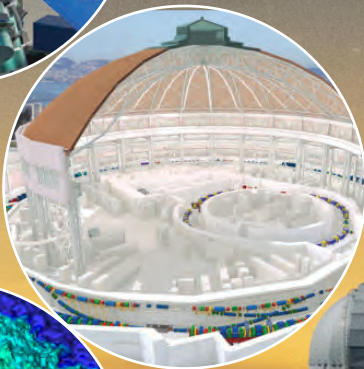
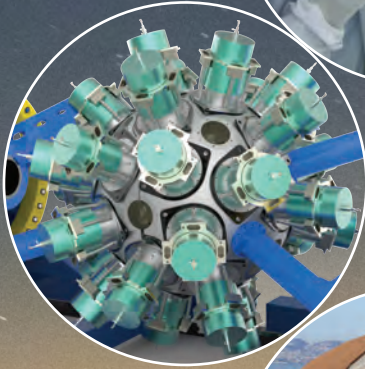


Lawrence Berkeley National Laboratory Annual Financial Report



2018



Annual Financial Report

2018

Ernest Orlando Lawrence Berkeley National Laboratory
University of California • Berkeley, California
January 2019

Front Cover:

Top — Construction of the Integrative Genomics Building (IGB) at Lawrence Berkeley National Laboratory. (Credit: Marilyn Chung/Berkeley Lab)

Second from Top — Assembly of the prototype for the LZ detector's core, known as a time projection chamber (TPC). (Credit: SLAC National Accelerator Laboratory)

Third from Top — Gamma-Ray Energy Tracking Array (GRETA), a powerful instrument used to accomplish a broad range of experiments that play an essential role in addressing the intellectual challenges of low-energy nuclear science. (Credit: Berkeley Lab)

Fourth from Top — Cutaway view of the Advanced Light Source showing new equipment (colored rings) that will be installed during the ALS Upgrade project. (Credit: Berkeley Lab)

Bottom — A visualization produced at NERSC: This simulation shows the turbulent gas when a supernova collides with a nearby star-forming halo. (Credit: Ken Chen/EACOA)

Background — A view of the Mayall Telescope (tallest telescope at right) at Kitt Peak National Observatory near Tucson, Arizona where the Dark Energy Spectroscopic Instrument (DESI) Survey is to be conducted. (Credit: Marilyn Chung/Berkeley Lab)

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Lawrence Berkeley National Laboratory is an internationally renowned research institution dedicated to addressing the world's most challenging scientific problems, from advancing sustainable energy solutions and creating useful new materials, to pushing the frontiers of computing and revealing the origin and fate of the universe. As the original home of "team science," which emphasizes large-scale interdisciplinary research in the public interest, Berkeley Lab's scientific expertise has been recognized with 13 Nobel Prizes. The University of California manages the Lab on behalf of the U.S. Department of Energy (DOE).



FY2018 financial results highlight a year of growth at the Lab under the leadership of Laboratory Director Michael Witherell and Deputy Lab Directors Horst Simon (Research) and Michael Brandt (Operations). The DOE continues to demonstrate its trust in the Lab to carry out its scientific mission through its continued investment in large-scale initiatives here.

Major scientific projects that are underway or will soon get underway include the Advanced Light Source Upgrade (ALS-U), Dark Energy Spectroscopic Instrument (DESI), ESnet 6, Gamma-Ray Energy Tracking Array (GRETA), NERSC 9, and LUX (Large Underground Xenon)-ZEPLIN (ZonEd Proportional scintillation in Liquid Noble gases) (LZ).

Infrastructure investments include construction of the Integrative Genomics Building, which will be completed by mid-2019, and the renewal of many of the important infrastructure systems that make the scientific mission possible, such as the power and water systems. In addition, the cleanup of the Old Town and Bayview sites will position the Lab for future growth.

Project management will play a key role in overseeing this wide range of capital investments. Projects and infrastructure oversight have been brought together in a new division, and planning for Lab long-term investment has been recognized as a critical position in Lab leadership.

The Lab continues to focus on, and invest in, the people who make accomplishing the mission possible. For example, the Lab has established and hired a Chief Diversity, Equity, and Inclusion Officer and a Chief Communications Officer, both of whom report directly to the Lab Director. Further, to ensure we have the people we need to continue the mission and lead the various areas of the Lab, we have improved both our training and succession planning processes.

Berkeley Lab received \$1.1B in FY2018 funding, a 16% increase over FY2017 across both programmatic and infrastructure activities. FY2018 spending was \$907M, an increase of 6% over FY2017. Given the uncertainty of the Lab's FY18 overall funding at the start of the fiscal year, which didn't get resolved until March 2018, costs lagged behind the funding increase and contributed to a growth in the ending uncosted balance. Lab leadership continues to actively manage the Lab's cost competitive position. The FY18 salary multiplier (a key measure of our competitive position) remained flat with previous year's levels and it is expected that the FY19 multiplier will continue this trend. Additionally, the indirect rate structure has been modified to assure ongoing cost competitiveness, and to assure appropriate alignment of institutional support and indirect charges to the ALS-U project. The Lab's total indirect budget reflected a very modest increase to accommodate a handful of infrastructure needs, along with escalation for fenced costs. All indirect-funded Operations units fully absorbed labor escalation to help mitigate any additional indirect budget increases.

OCFO Mission: High-value financial and procurement services and strategic solutions that contribute to Berkeley Lab's research and stewardship mission

The Office of the Chief Financial Officer (OCFO) played a key role in shaping and managing the financial strategy that allows the Lab to make successful investments. It has delivered effective financial management during a time of budget uncertainty, working with the National Lab Directors Council's CFO group to provide comparable budgetary impact analyses in response to DOE program requests. The OCFO also led the effort to simplify and rationalize the Lab's indirect rate struc-

ture for a phased implementation in FY19 through FY20. In addition, the OCFO continues to make progress on key initiatives in our Strategic Roadmap. The OCFO led advance planning efforts and piloted new support models for major projects and programs such as ALS-U and ESnet.

Essential to the execution and stewardship of the Lab's mission is a positive and productive Procurement Evaluation and

Re-Engineering Team (PERT) review, a periodic DOE-led assessment of the Lab's Purchasing System, along with a new Field Finance assurance plan that promotes effective stewardship of Lab resources. In the arena of continuous process and service improvements, the Controller's Office developed financial reports that facilitate easy assessment of the Lab's financial health, and implemented a Cvent system, which allows for the tracking and approval processing of events and meals, replacing a labor-intensive manual process. We upgraded and enhanced FMS, eSRA, and reporting tools to deliver additional functionalities and efficiencies to end-users.

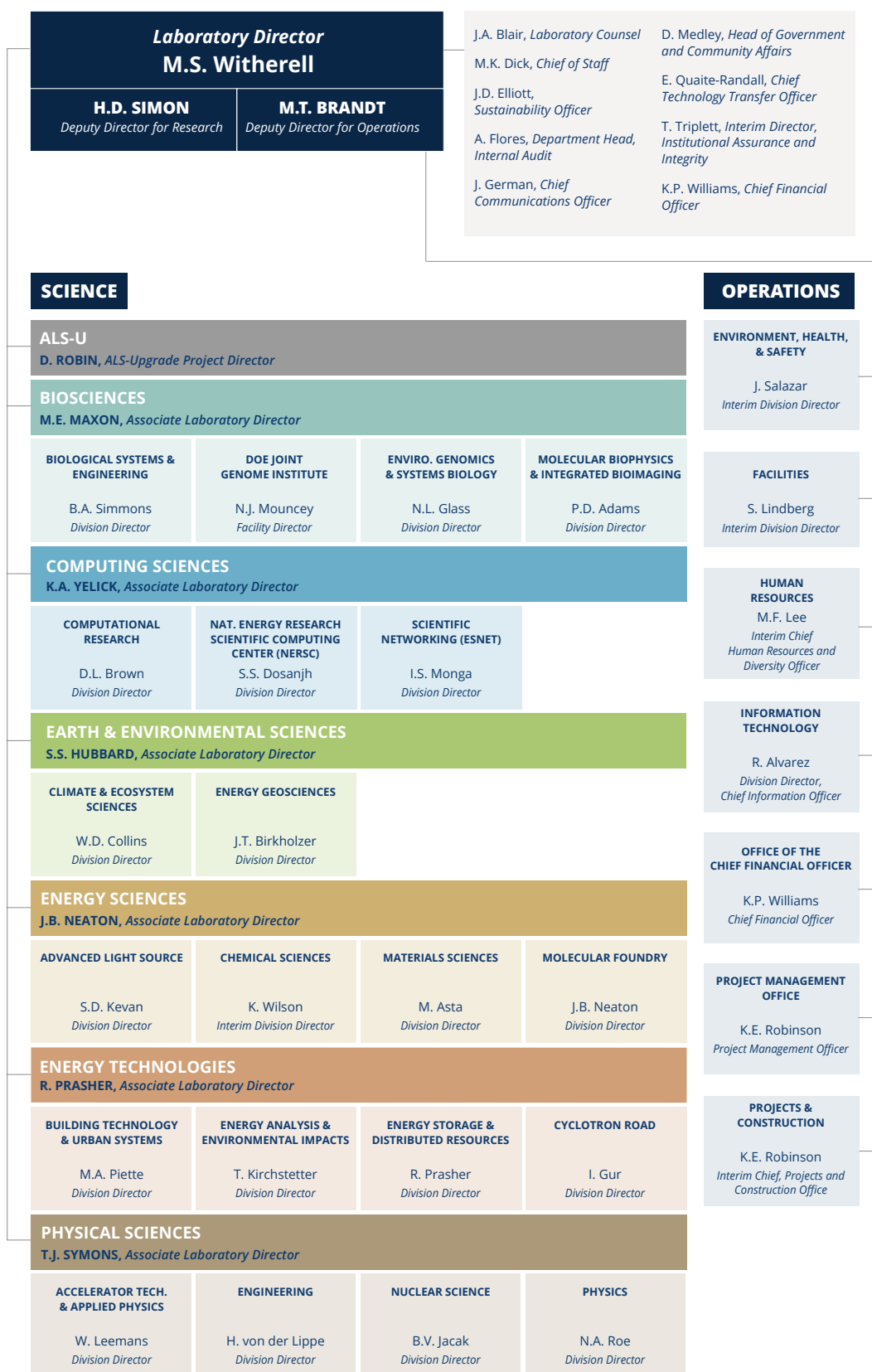
The OCFO continues to invest in our people. We piloted a mentoring program that is designed to match seasoned

employees with newer team members and refreshed our OCFO training strategy to ensure that all OCFO employees have the necessary skill sets to continue to deliver on our promises to the Lab. We broadened our diversity work by introducing Diversity, Equity, and Inclusion discussions as part of our ongoing OCFO meetings. At the close of the fiscal year, we said goodbye to our long-time CFO Kim Williams. The organization continues to focus on our partnerships with scientific customers and key stakeholders and to assure efficient services, strong consultative support, and effective stewardship as we prepared for this transition.

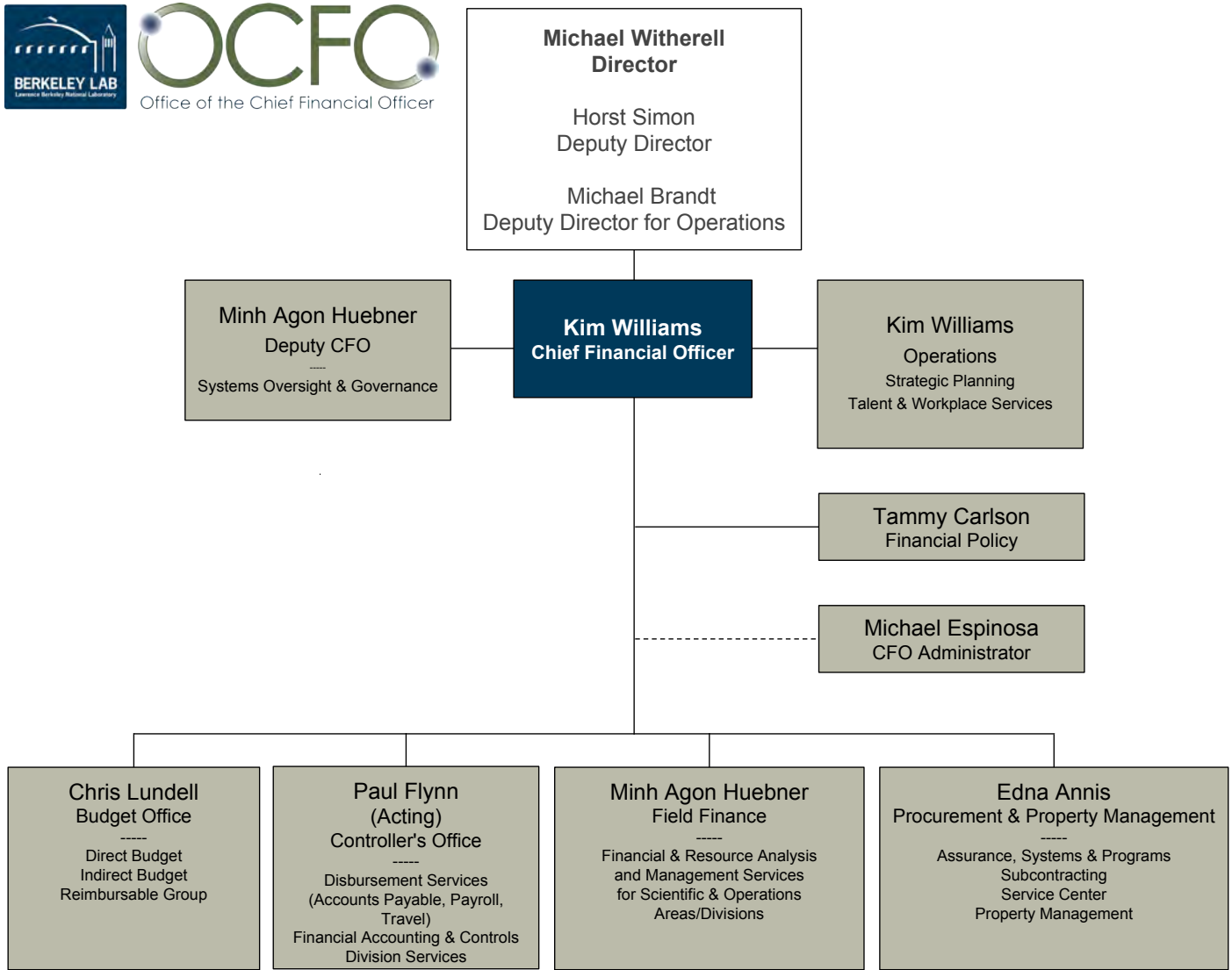
Berkeley Lab's FY2018 progress on all fronts — scientific, operations, and financial management — was instrumental in ensuring that the Lab continues to bring science solutions to the world.

Minh Agon Huebner
Interim Chief Financial Officer

Lawrence Berkeley National Laboratory (LBNL), University of California



Office of the Chief Financial Officer



INSTITUTIONAL INFORMATION

1

Where Did Your Program Dollars Go in FY2018?

Expenses	DOE Operating Costs	DOE Integrated Contractors Costs	Construction and Equipment	SPP Non-DOE
DIRECT				
Direct Labor				
UC Labor (a)	\$0.35	\$0.35	\$0.09	\$0.35
Contract Labor	\$0.00	\$0.00	\$0.00	\$0.00
Organization/Area Burden	\$0.06	\$0.06	\$0.02	\$0.06
Subtotal Direct Labor	\$0.41	\$0.40	\$0.11	\$0.41
Other Direct				
Services	\$0.19	\$0.18	\$0.66	\$0.15
Materials	\$0.07	\$0.11	\$0.16	\$0.06
Utilities	\$0.01	\$0.00	\$0.00	\$0.00
Other Expenses (b)	\$0.01	\$0.00	\$0.00	\$0.01
Recharges (c)	\$0.02	\$0.04	\$0.00	\$0.05
Travel	\$0.02	\$0.01	\$0.00	\$0.01
Subtotal Other Direct	\$0.32	\$0.35	\$0.83	\$0.28
Total Direct	\$0.73	\$0.75	\$0.94	\$0.69
INDIRECT				
Procurement	\$0.01	\$0.01	\$0.01	\$0.01
Travel	\$0.00	\$0.00	\$0.00	\$0.00
G&A (Other Inst.)	\$0.26	\$0.24	\$0.05	\$0.30
Total Indirect	\$0.27	\$0.25	\$0.06	\$0.31
TOTAL EXPENSES	\$1.00	\$1.00	\$1.00	\$1.00

Note: Minor variances may occur due to rounding.
(a) UC Labor includes salary and benefits for Scientists/Engineers, Admin., Students/GSRAs and Campus Labor.
(b) Includes misc. expenses (stipends, sales tax, freight, etc.).
(c) Distributed activities used by direct funded programs. Includes recharges credited back to direct operating accounts such as ALS and ESnet.

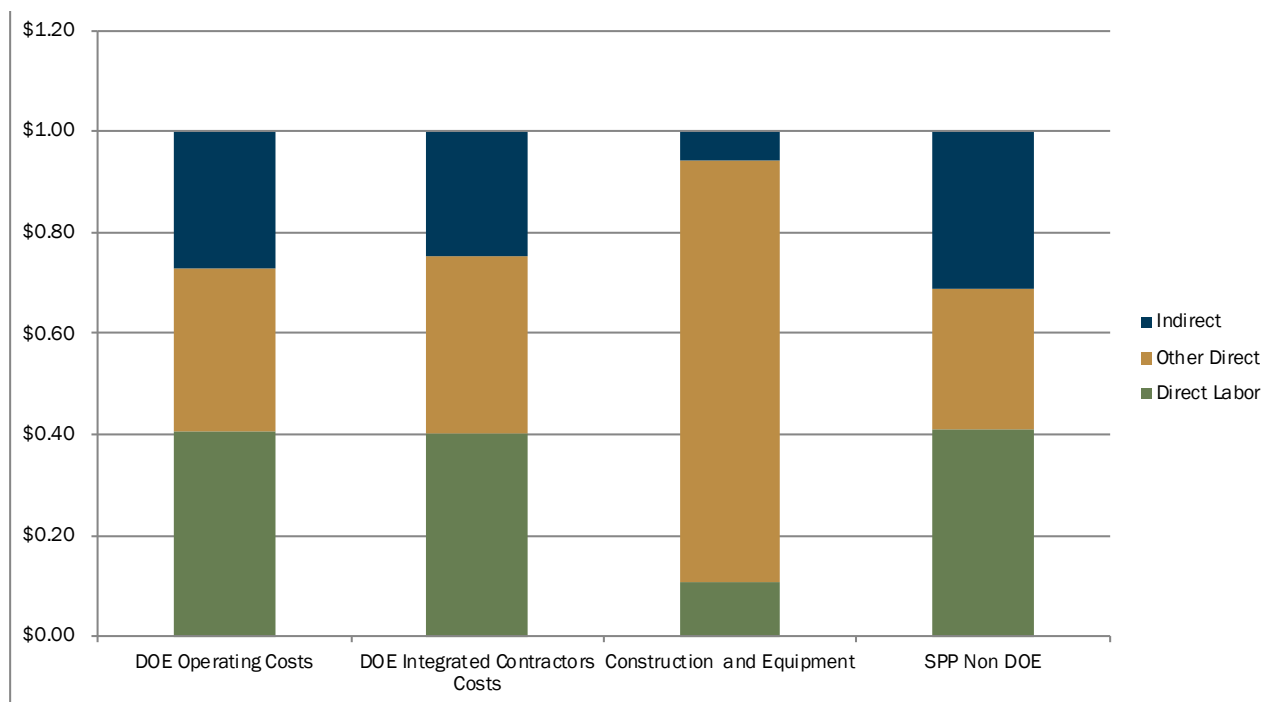


Table 1.1

Cost Trends by Expense Category, FY2014-FY2018 (\$M and % of Total)

Expenses	FY2014		FY2015		FY2016		FY2017		FY2018	
	\$M	%	\$M	%	\$M	%	\$M	%	\$M	%
DIRECT										
Direct Labor										
UC Labor (a)	274.8	35.0%	277.4	34.2%	275.1	33.3%	283.1	33.0%	289.2	31.9%
Contract Labor	0.4	0.0%	0.4	0.0%	1.3	0.2%	1.0	0.1%	0.8	0.1%
Organization/ALD Burden	42.4	5.4%	42.8	5.3%	47.5	5.7%	48.2	5.6%	47.7	5.3%
Subtotal Direct Labor	317.6	40.5%	320.5	39.5%	323.9	39.2%	332.3	38.7%	337.7	37.2%
Other Direct										
Services	150.8	19.2%	150.2	18.5%	158.1	19.1%	174.3	20.3%	217.6	24.0%
Materials	71.1	9.1%	82.6	10.2%	77.9	9.4%	77.2	9.0%	74.5	8.2%
Utilities	9.2	1.2%	9.6	1.2%	6.9	0.8%	6.8	0.8%	7.6	0.8%
Other Expenses (b)	3.6	0.5%	5.7	0.7%	5.6	0.7%	5.5	0.6%	6.3	0.7%
Recharges (c)	23.4	3.0%	21.9	2.7%	23.3	2.8%	22.4	2.6%	23.4	2.6%
Travel	12.2	1.6%	11.8	1.5%	12.7	1.5%	11.9	1.4%	12.4	1.4%
Subtotal Other Direct	270.2	34.4%	281.8	34.7%	284.6	34.4%	298.1	34.7%	341.6	37.7%
Total Direct	587.8	74.9%	602.3	74.2%	608.5	73.6%	630.4	73.5%	679.3	74.9%
INDIRECT										
Procurement	8.5	1.1%	9.2	1.1%	9.6	1.2%	9.6	1.1%	9.6	1.1%
Travel	1.3	0.2%	0.9	0.1%	1.0	0.1%	1.1	0.1%	1.1	0.1%
G&A (Other Inst.)	187.3	23.9%	198.9	24.5%	207.8	25.1%	217.0	25.3%	217.1	23.9%
Total Indirect	197.1	25.1%	209.0	25.8%	218.4	26.4%	227.7	26.5%	227.9	25.1%
TOTAL EXPENSES	784.9	100.0%	811.3	100.0%	826.9	100.0%	858.1	100.0%	907.2	100.0%

Note: Minor variances may occur due to rounding.

(a) UC Labor includes salary and benefits for Scientists/Engineers, Admin., Students/GSRA's and Campus Labor.

(b) Includes misc. expenses (stipends, sales tax, freight, etc.).

(c) Distributed activities used by direct funded programs. Includes recharges credited back to direct operating accounts such as ALS and ESnet.

Direct Cost Trends by Area and Division, FY2014 - FY2018 (\$K)

Area and Division	FY2014	FY2015	FY2016	FY2017	FY2018
Biosciences (a)	175,688	174,901	169,850	170,286	162,458
Biological Systems & Engineering	-	-	45,702	43,767	38,719
Environmental Genomics & System Biology	-	-	17,744	15,834	16,894
Genomics	7,036	7,963	-	-	-
Joint Genome Institute	71,014	73,127	68,915	71,642	65,904
Life Sciences	34,852	30,132	-	-	-
Molecular Biophysics & Integrated Bioimaging	-	-	37,489	39,043	40,941
Physical Biosciences	62,787	63,680	-	-	-
Computing Sciences (b)	134,324	167,127	158,354	172,732	183,308
Computational Research	-	32,171	35,563	37,666	43,796
Computing Sciences	134,324	-	-	-	-
National Energy Research Scientific Computing Center	-	93,768	80,041	95,180	99,264
Scientific Networking	-	41,189	42,749	39,886	40,248
Directorate & Operations	19,393	17,032	23,135	42,947	74,699
Environment, Health, and Safety	51	34	31	29	69
Facilities	11,571	9,323	14,098	33,231	69,834
Information Technology	2,550	2,306	3,128	4,200	3,891
Laboratory Directorate	1,310	173	316	219	92
Other	51	106	123	162	37
Public Affairs (c)	-	1,422	1,520	1,459	-
Protective Services (c)	3,860	3,670	3,919	3,648	-
Human Resources	-	-	-	-	777
Earth & Environmental Sciences (d)	58,125	64,683	65,537	65,432	66,794
Climate & Ecosystems	-	-	36,519	36,659	35,345
Earth Sciences	58,125	64,683	-	-	-
Energy Geosciences	-	-	29,019	28,774	31,449
Note: Minor variances may occur due to rounding. (a) Biosciences reorganized in FY2016, forming Biological Systems & Engineering, Environmental Genomics & System Biology, Joint Genome Institute, and Molecular Biophysics & Integrated Bioimaging. (b) Computing Sciences broken out into Computation Research, National Energy Research Scientific Computing Center, Scientific Computing Center in FY2015. (c) In 2018, Protective Services merged with Facilities and Public Affairs reorganized into Human Resources, IT, and Lab Directorate. (d) Environmental Sciences reorganized in FY2016, forming Climate & Ecosystems and Energy Geosciences.					

continued...

Direct Cost Trends by Area and Division, FY2014 - FY2018 (\$K) Continued

Area and Division	FY2014	FY2015	FY2016	FY2017	FY2018
Energy Sciences (e)	174,961	157,831	163,012	164,136	172,134
Advanced Light Source	69,647	60,233	65,578	73,900	79,054
Chemical Sciences	27,281	24,737	28,478	26,702	25,985
Material Sciences	78,034	72,860	68,955	31,553	33,346
Molecular Foundry	-	-	-	31,981	33,750
Energy Technologies (f)	107,543	106,834	107,666	113,137	110,305
Building Technologies & Urban Systems	-	-	33,893	38,218	34,223
Cyclotron Road	-	-	1,739	2,937	2,629
Energy Analysis & Environmental Impacts	-	-	42,576	40,649	42,270
Energy Storage & Distributed Resources	-	-	29,458	31,333	31,183
Energy Technologies	107,543	106,834	-	-	-
Physical Sciences	114,883	122,867	139,346	129,444	137,486
Accelerator Technology & Applied Physics	28,562	32,470	38,772	43,590	42,353
Engineering	5,151	4,549	2,223	1,375	2,153
Nuclear Science	32,397	33,439	33,681	32,130	32,565
Physics	48,773	52,409	64,669	52,349	60,416
DIVISION TOTAL	784,917	811,276	826,899	858,115	907,185

Note: Minor variances may occur due to rounding.

e) Energy Sciences reorganized in FY2017, Molecular Foundry division created (formerly in Materials Sciences division).

f) Energy Technologies reorganized in FY2016, forming Building Technologies & Urban Systems, Cyclotron Road, Energy Analysis Environmental Impact, Energy Storage & Distributed Resources.

Costs by Direct Funding Source by Area and Division, FY2018 (\$K)

Area and Division	FY2018						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal (f)	Operating Subtotal	Capital and Equipment	Total
Biosciences (a)	114,387	1,544	28,818	17,174	161,924	534	162,458
Biological Systems & Energy	25,842	309	8,406	4,162	38,719	-	38,719
Environmental Genomics & System Biology	7,861	12	5,631	3,391	16,894	-	16,894
Joint Genome Institute	65,233	-	-	137	65,370	534	65,904
Molecular Biophysics & Integrated Bioimaging	15,452	1,223	14,781	9,485	40,941	-	40,941
Computing Sciences (b)	154,269	19,275	2,135	1,199	176,878	6,430	183,308
Computational Research	25,793	15,649	2,094	259	43,796	-	43,796
National Energy Research Scientific Computing Center	91,548	545	-	741	92,834	6,430	99,264
Scientific Networking	36,928	3,081	41	198	40,248	-	40,248
Directorate & Operations	23,424	286	17	-	23,727	50,972	74,699
Environment, Health, and Safety	69	-	-	-	69	-	69
Facilities	18,862	-	-	-	18,862	50,972	69,834
Information Technology	3,694	197	-	-	3,891	-	3,891
Laboratory Directorate	30	45	17	-	92	-	92
Other	-	37	-	-	37	-	37
Protective Services	-	-	-	-	-	-	-
Public Affairs	-	-	-	-	-	-	-
Human Resources	770	7	-	-	777	-	777
Earth & Environmental Sciences (c)	53,052	5,961	566	7,099	66,677	117	66,794
Climate & Ecosystems	30,302	3,467	387	1,081	35,236	110	35,345
Energy Geosciences	22,750	2,495	179	6,018	31,442	7	31,449
Note: Minor variances may occur due to rounding. (a) Biosciences reorganized in FY2016, forming Biological Systems & Engineering, Environmental Genomics & System Biology, Joint Genome Institute, and Molecular Biophysics & Integrated Bioimaging. (b) Computing Sciences broken out into Computation Research, National Energy Research Scientific Computing Center, Scientific Computing Center in FY2015. (c) Environmental Sciences reorganized in FY2016, forming Climate & Ecosystems and Energy Geosciences. (d) Energy Sciences reorganized in FY2017, Molecular Foundry division created (formerly in Materials Sciences division). (e) Energy Technologies reorganized in FY2016, forming Building Technologies & Urban Systems, Cyclotron Road, Energy Analysis Environmental Impact, Energy Storage & Distributed Resources. (f) Cooperative Research and Development Agreements are included in SPP Non-Federal.							

continued...

Costs by Direct Funding Source by Area and Division, FY2018 (\$K) Continued

Area and Division	FY2018						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal (f)	Operating Subtotal	Capital and Equipment	Total
Energy Sciences (d)	151,530	438	2,458	10,574	165,000	7,134	172,134
Advanced Light Source	73,603	34	-	1,787	75,424	3,629	79,054
Chemical Sciences	23,997	221	240	1,010	25,468	517	25,985
Materials Sciences	25,446	35	-	6,868	32,349	997	33,346
Molecular Foundry	28,484	148	2,218	909	31,759	1,991	33,750
Energy Technologies (e)	81,568	2,352	4,768	21,617	110,305	-	110,305
Building Technology & Urban Systems	23,861	579	1,738	8,045	34,223	-	34,223
Cyclotron Road	2,480	-	123	26	2,629	-	2,629
Energy Analysis & Environmental Impacts	30,788	615	2,408	8,459	42,270	-	42,270
Energy Storage & Distributed Resources	24,439	1,158	499	5,087	31,183	-	31,183
Physical Sciences	70,862	17,576	7,911	4,955	101,304	36,182	137,486
Accelerator Technology & Applied Physics	19,927	16,181	-	1,321	37,429	4,924	42,353
Engineering	-	323	131	1,129	1,583	571	2,153
Nuclear Science	20,508	480	6,770	2,071	29,829	2,735	32,565
Physics	30,426	593	1,009	435	32,463	27,953	60,416
DIVISION TOTAL	649,093	47,432	46,674	62,618	805,816	101,369	907,185

Note: Minor variances may occur due to rounding.

(a) Biosciences reorganized in FY2016, forming Biological Systems & Engineering, Environmental Genomics & System Biology, Joint Genome Institute, and Molecular Biophysics & Integrated Bioimaging.

(b) Computing Sciences broken out into Computation Research, National Energy Research Scientific Computing Center, Scientific Computing Center in FY2015.

(c) Environmental Sciences reorganized in FY2016, forming Climate & Ecosystems and Energy Geosciences.

(d) Energy Sciences reorganized in FY2017, Molecular Foundry division created (formerly in Materials Sciences division).

(e) Energy Technologies reorganized in FY2016, forming Building Technologies & Urban Systems, Cyclotron Road, Energy Analysis Environmental Impact, Energy Storage & Distributed Resources.

(f) Cooperative Research and Development Agreements are included in SPP Non-Federal.

Costs by Direct Funding Source by Area and Division, FY2017 (\$K)

Area and Division	FY2017						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal (f)	Operating Subtotal	Capital and Equipment	Total
Biosciences (a)	126,222	969	26,570	15,680	169,441	845	170,286
Biological Systems & Energy	32,152	120	6,671	4,824	43,767	-	43,767
Environmental Genomics & System Biology	6,435	-	6,313	3,086	15,834	-	15,834
Joint Genome Institute	70,546	-	-	251	70,797	845	71,642
Molecular Biophysics & Integrated Bioimaging	17,089	849	13,586	7,519	39,043	-	39,043
Computing Sciences (b)	154,620	14,021	3,735	356	172,732	-	172,732
Computational Research	26,290	9,461	1,725	190	37,666	-	37,666
National Energy Research Scientific Computing Center	92,953	169	1,995	62	95,180	-	95,180
Scientific Networking	35,377	4,390	15	104	39,886	-	39,886
Directorate & Operations	24,912	567	1	-	25,481	17,466	42,947
Environment, Health, and Safety	29	-	-	-	29	-	29
Facilities	15,773	-	-	-	15,773	17,459	33,231
Information Technology	3,861	338	-	-	4,200	-	4,200
Laboratory Directorate	150	67	1	-	219	-	219
Other	-	162	-	-	162	-	162
Protective Services	3,641	-	-	-	3,641	8	3,648
Public Affairs	1,459	-	-	-	1,459	-	1,459
Earth & Environmental Sciences (c)	52,165	5,080	1,299	6,721	65,265	167	65,432
Climate & Ecosystems	30,998	3,506	735	1,252	36,491	167	36,659
Energy Geosciences	21,167	1,574	564	5,468	28,774	-	28,774
Note: Minor variances may occur due to rounding. (a) Biosciences reorganized in FY2016, forming Biological Systems & Engineering, Environmental Genomics & System Biology, Joint Genome Institute, and Molecular Biophysics & Integrated Bioimaging. (b) Computing Sciences broken out into Computation Research, National Energy Research Scientific Computing Center, Scientific Computing Center in FY2015. (c) Environmental Sciences reorganized in FY2016, forming Climate & Ecosystems and Energy Geosciences. (d) Energy Sciences reorganized in FY2017, Molecular Foundry division created (formerly in Materials Sciences division). (e) Energy Technologies reorganized in FY2016, forming Building Technologies & Urban Systems, Cyclotron Road, Energy Analysis Environmental Impact, Energy Storage & Distributed Resources. (f) Cooperative Research and Development Agreements are included in SPP Non-Federal.							

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Costs by Direct Funding Source by Area and Division, FY2017 (\$K) Continued

Area and Division	FY2017						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non- Federal (f)	Operating Subtotal	Capital and Equipment	Total
Energy Sciences (d)	145,620	578	2,382	9,845	158,425	5,711	164,136
Advanced Light Source	67,228	135	11	1,692	69,066	4,834	73,900
Chemical Sciences	25,586	69	9	1,038	26,702	-	26,702
Material Sciences	24,648	162	-	6,743	31,553	(0)	31,553
Molecular Foundry	28,158	212	2,362	372	31,104	877	31,981
Energy Technologies (e)	85,644	1,748	6,404	19,341	113,137	-	113,137
Building Technologies & Urban Systems	28,346	59	1,873	7,941	38,218	-	38,218
Cyclotron Road	2,932	-	5	-	2,937	-	2,937
Energy Analysis & Environmental Impacts	28,659	979	3,407	7,605	40,649	-	40,649
Energy Storage & Distributed Resources	25,707	710	1,120	3,796	31,333	-	31,333
Physical Sciences	68,019	18,480	7,740	5,425	99,664	29,780	129,444
Accelerator Technology & Applied Physics	17,848	17,647	-	2,158	37,652	5,938	43,590
Engineering	-	218	65	977	1,260	115	1,375
Nuclear Science	21,153	168	7,080	2,118	30,519	1,610	32,130
Physics	29,018	448	595	172	30,232	22,117	52,349
DIVISION TOTAL	657,202	41,444	48,131	57,368	804,145	53,970	858,115

Note: Minor variances may occur due to rounding.

(a) Biosciences reorganized in FY2016, forming Biological Systems & Engineering, Environmental Genomics & System Biology, Joint Genome Institute, and Molecular Biophysics & Integrated Bioimaging.

(b) Computing Sciences broken out into Computation Research, National Energy Research Scientific Computing Center, Scientific Computing Center in FY2015.

(c) Environmental Sciences reorganized in FY2016, forming Climate & Ecosystems and Energy Geosciences.

(d) Energy Sciences reorganized in FY2017, Molecular Foundry division created (formerly in Materials Sciences division).

(e) Energy Technologies reorganized in FY2016, forming Building Technologies & Urban Systems, Cyclotron Road, Energy Analysis Environmental Impact, Energy Storage & Distributed Resources.

(f) Cooperative Research and Development Agreements are included in SPP Non-Federal.

Costs by Direct Funding Source by Area and Division, FY2016 (\$K)

Area and Division	FY2016						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal (e)	Operating Subtotal	Capital and Equipment	Total
Biosciences (a)	127,768	302	26,161	15,619	169,850	-	169,850
Biological Systems & Energy	35,876	117	5,794	3,916	45,702	-	45,702
Environmental Genomics & System Biology	6,250	-	6,521	4,972	17,744	-	17,744
Joint Genome Institute	68,218	-	-	697	68,915	-	68,915
Molecular Biophysics & Integrated Bioimaging	17,425	185	13,845	6,034	37,489	-	37,489
Computing Sciences (b)	143,950	6,206	2,738	797	153,691	4,662.13	158,354
Computational Research	30,820	1,481	2,706	556	35,563	-	35,563
National Energy Research Scientific Computing Center	74,841	347	-	192	75,379	4,662	80,041
Scientific Networking	38,289	4,378	32	50	42,749	-	42,749
Directorate & Operations	18,392	123	-	-	18,515	4,619.57	23,135
Environment, Health, and Safety	31	-	-	-	31	-	31
Facilities	9,540	-	-	-	9,540	4,557	14,098
Information Technology	3,128	-	-	-	3,128	-	3,128
Laboratory Directorate	316	-	-	-	316	-	316
Other	-	123	-	-	123	-	123
Protective Services	3,857	-	-	-	3,857	62	3,919
Public Affairs	1,520	-	-	-	1,520	-	1,520
Earth & Environmental Sciences (c)	52,641	3,103	1,450	8,065	65,259	278.15	65,537
Climate & Ecosystems	30,751	2,930	871	1,692	36,243	275	36,519
Energy Geosciences	21,890	174	579	6,373	29,016	3	29,019
Energy Sciences	142,723	1,277	2,892	8,159	155,052	7,960.00	163,012
Advanced Light Source	58,538	557	14	1,418	60,527	5,052	65,578
Chemical Sciences	27,694	84	82	619	28,478	-	28,478
Material Sciences	56,492	636	2,797	6,122	66,047	2,908	68,955
Energy Technologies (d)	80,143	1,508	8,499	17,499	107,650	15.48	107,666
Building Technologies & Urban Systems	24,337	34	2,651	6,870	33,893	-	33,893
Cyclotron Road	1,694	-	45	-	1,739	-	1,739
Energy Analysis & Environmental Impacts	30,118	291	5,004	7,149	42,561	15	42,576
Energy Storage & Distributed Resources	23,994	1,183	800	3,480	29,458	-	29,458
Physical Sciences	87,897	10,809	7,983	6,441	113,130	26,215.90	139,346
Accelerator Technology & Applied Physics	19,459	9,631	-	3,143	32,233	6,540	38,772
Engineering	-	342	247	1,632	2,220	3	2,223
Nuclear Science	21,787	109	7,491	1,520	30,908	2,773	33,681
Physics	46,651	727	245	146	47,769	16,900	64,669
DIVISION TOTAL	653,515	23,328	49,724	56,581	783,148	43,751	826,899

Note: Minor variances may occur due to rounding.

(a) Biosciences reorganized in FY2016, forming Biological Systems & Engineering, Environmental Genomics & System Biology, Joint Genome Institute, and Molecular Biophysics & Integrated Bioimaging.

(b) Computing Sciences broken out into Computation Research, National Energy Research Scientific Computing Center, Scientific Computing Center in FY2015.

(c) Environmental Sciences reorganized in FY2016, forming Climate & Ecosystems and Energy Geosciences.

(d) Energy Technologies reorganized in FY2016, forming Building Technologies & Urban Systems, Cyclotron Road, Energy Analysis Environmental Impact, Energy Storage & Distributed Resources.

(e) Cooperative Research and Development Agreements are included in SPP Non-Federal.

Table 1.2d

Costs by Direct Funding Source by Area and Division, FY2015 (\$K)

Area and Division	FY2015						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal (b)	Operating Subtotal	Capital and Equipment	Total
Biosciences	128,701	646	31,014	14,541	174,901	-	174,901
Genomics - JGI	72,528	-	-	599	73,127	-	73,127
Genomics	10	-	5,062	2,891	7,963	-	7,963
Life Sciences	4,707	151	21,329	3,944	30,132	-	30,132
Physical Biosciences	51,456	494	4,623	7,106	63,680	-	63,680
Computing Sciences (a)	161,713	2,867	2,225	322	167,127	-	167,127
Computation Research	29,272	430	2,199	270	32,171	-	32,171
National Energy Research Scientific Computing Center	93,758	9	-	-	93,768	-	93,768
Scientific Networking Division	38,682	2,428	26	53	41,189	-	41,189
Directorate & Operations	14,069	106	-	-	14,174	2,858	17,032
Environment, Health, and Safety	34	-	-	-	34	-	34
Facilities	6,979	-	-	-	6,979	2,344	9,323
Information Technology	2,306	-	-	-	2,306	-	2,306
Lab Directorate	173	-	-	-	173	-	173
Other	-	106	-	-	106	-	106
Protective Services	3,155	-	-	-	3,155	514	3,670
Public Affairs	1,422	-	-	-	1,422	-	1,422
Earth & Environmental Sciences	48,624	3,988	1,955	9,358	63,925	758	64,683
Earth Sciences	48,624	3,988	1,955	9,358	63,925	758	64,683
Energy Sciences	140,663	1,249	3,125	8,616	153,653	4,177	157,831
Advanced Light Source	53,892	623	6	1,536	56,056	4,177	60,233
Chemical Sciences	23,949	33	151	605	24,737	-	24,737
Materials Sciences	62,823	593	2,969	6,476	72,860	0	72,860
Energy Technologies	80,840	1,051	10,436	13,623	105,950	884	106,834
Energy Technologies	80,840	1,051	10,436	13,623	105,950	884	106,834
Physical Sciences	92,659	9,387	8,279	4,785	115,111	7,756	122,867
Accelerator Technology & Applied Physics	18,067	7,209	-	948	26,223	6,247	32,470
Engineering	-	1,567	443	2,390	4,401	148	4,549
Nuclear Science	22,799	247	7,836	1,291	32,173	1,266	33,439
Physics	51,794	364	-	156	52,314	95	52,409
DIVISION TOTAL	667,268	19,292	57,036	51,245	794,842	16,435	811,276

Note: Minor variances may occur due to rounding.

(a) Computing Sciences broken out into Computation Research, National Energy Research Scientific Computing Center, Scientific Computing Center in FY2015.

(b) Cooperative Research and Development Agreements are included in SPP Non-Federal.

Costs by Direct Funding Source by Area and Division, FY2014 (\$K)

Area and Division	FY2014						Total
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal (a)	Operating Subtotal	Capital and Equipment	
Biosciences	126,537	680	34,120	13,278	174,615	1,072	175,688
Genomics	-	-	4,264	2,772	7,036	-	7,036
Genomics - JGI	70,474	-	-	539	71,014	-	71,014
Life Sciences	6,235	40	24,350	4,227	34,852	-	34,852
Physical Biosciences	49,828	640	5,507	5,739	61,715	1,072	62,787
Computing Sciences	121,889	3,719	3,237	457	129,303	5,020	134,324
Computing Sciences	121,889	3,719	3,237	457	129,303	5,020	134,324
Directorate & Operations	11,173	62	-	128	11,363	8,030	19,393
Environment, Health, and Safety	42	7	-	-	49	2	51
Facilities	4,058	-	-	-	4,058	7,512	11,571
Information Technology	2,422	-	-	128	2,550	-	2,550
Protective Services	3,345	-	-	-	3,345	516	3,860
Lab Directorate	1,306	4	-	-	1,310	-	1,310
Other	-	51	-	-	51	-	51
Earth & Environmental Sciences	42,308	2,930	2,533	10,281	58,053	72	58,125
Earth Sciences	42,308	2,930	2,533	10,281	58,053	72	58,125
Energy Sciences	148,948	496	4,233	12,416	166,092	8,869	174,961
Advanced Light Source	59,289	269	-	1,222	60,781	8,866	69,647
Chemical Sciences	23,705	-	1,722	1,854	27,281	-	27,281
Materials Sciences	65,954	227	2,511	9,340	78,031	3	78,034
Energy Technologies	82,580	1,768	9,001	14,194	107,543	-	107,543
Environmental Energy Technologies	82,580	1,768	9,001	14,194	107,543	-	107,543
Physical Sciences	84,588	9,229	7,600	5,030	106,448	8,435	114,883
Accelerator & Fusion Research	16,896	3,989	-	1,068	21,954	6,608	28,562
Engineering	163	2,307	531	2,139	5,140	11	5,151
Nuclear Science	19,424	2,547	7,069	1,541	30,582	1,816	32,397
Physics	48,105	385	(0)	282	48,773	-	48,773
DIVISION TOTAL	618,024	18,884	60,725	55,785	753,418	31,499	784,917

Note: Minor variances may occur due to rounding.

(a) Cooperative Research and Development Agreements are included in SPP Non-Federal.

Indirect Budget Costs by Area and Division, FY2018 (\$K)

Division/ALD	Distributed Support Costs			Institutional Costs						Total (a)
	ALD/ Org. Burden	Service Centers (b)	Other (c)	LDRD	IGPP	G&A	Procurement Burden	Site Support	Travel Burden	
Biosciences	11,685	13,172	-	3,740	-	-	-	-	-	28,598
Bioscience Area Office	11,685	604								12,289
Biological Systems & Energy		6,516		1,341						7,857
Environmental Genomics & System Biology				1,672						1,672
Joint Genome Institute		4,724		18						4,742
Molecular Biophysics & Integrated Bioimaging		1,329		709						2,038
Computing Sciences	6,971	3,792	-	3,228	-	-	-	-	-	13,991
Computing Sciences ALD	3,351	3,792								7,143
Computational Research	2,461			2,808						5,269
National Energy Research Scientific Computing Center	860			420						1,281
Scientific Networking	298									298
Directorate & Operations	8,135	23,128	-	194	8,922	87,567	14,000	102,184	1,331	245,461
Laboratory Directorate		1,283		194		21,057		606		23,140
Environment, Health, and Safety								22,995		22,995
Facilities	5,152	9,777			8,922		1,894	78,584		104,329
Human Resources		4,029				10,723				14,752
Information Technology	2,984	7,812				32,944				43,739
Office Chief Financial Officer		226				8,575	12,106		1,331	22,238
Operations						14,268				14,268
Note: Minor variances may occur due to rounding.										
(a) Summation of indirect budget costs provided only to show magnitude of dollars being managed and does not equate to total indirect costs since there are overlaps between indirect budgets. For example, some organization burden costs are included in G&A and Recharges.										
(b) Service Centers includes recharge cost centers that default to B&R YNO1 (project type OHRCH) only and GSRA pass through cost.										
(c) Includes: LBNL's Office of Homeland Security (formerly known as Nuclear Non-Proliferation).										

continued...

Indirect Budget Costs by Area and Division, FY2018 (\$K) Continued

Division/ALD	Distributed Support Costs			Institutional Costs						Total (a)
	ALD/ Org. Burden	Service Centers (b)	Other (c)	LDRD	IGPP	G&A	Procurement Burden	Site Support	Travel Burden	
Earth & Environmental Sciences	4,610	67	-	2,690	-	-	-	18	-	7,385
Earth & Environmental Science ALD	4,610	67						18		4,695
Climate & Ecosystems				1,179						1,179
Energy Geosciences				1,512						1,512
Energy Sciences	8,659	105	-	3,920	-	-	-	-	-	12,684
Energy Sciences ALD	670									670
Advanced Light Source	2,366			475						2,841
Chemical Sciences	1,871			1,272						3,143
Materials Sciences	2,287	105		1,587						3,979
Molecular Foundry	1,465			586						2,051
Energy Technologies	7,583	2,991	-	2,615	-	-	-	-	-	13,189
ETA Area Office	7,583									7,583
Building Technology & Urban Systems		1,219		635						1,854
Energy Storage & Distributed Resources		787		1,434						2,221
Energy Analysis & Environmental Impacts		984		547						1,531
Physical Sciences	10,871	1,813	233	3,927	-	1,018	-	1,357	-	19,218
Physical Sciences ALD	2									2
Accelerator Technology & Applied Physics	1,640	33		933						2,605
Engineering	5,043	1,564		183		1,018		1,357		9,165
Nuclear Science	1,702	216	233	1,194						3,344
Physics	2,485			1,617						4,102
GRAND TOTAL	58,513	45,067	233	20,317	8,922	88,585	14,000	103,559	1,331	340,527

Note: Minor variances may occur due to rounding.

(a) Summation of indirect budget costs provided only to show magnitude of dollars being managed and does not equate to total indirect costs since there are overlaps between indirect budgets. For example, some organization burden costs are included in G&A and Recharges.

(b) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only and GSRA pass through cost.

(c) Includes: LBNL's Office of Homeland Security (formerly known as Nuclear Non-Proliferation).

Average FTE Breakdown by Area and Division, FY2018

Division/ALD	Direct Funded FTEs				Indirect Funded FTEs				Total FTEs
	DOE Direct Operating	Other Direct Operating (a)	Capital & Equipment	Direct Funded Total	ALD/ ORG Burden	Service Centers (b)	Operations Overhead (c)	Indirect Funded Total	
Biosciences	313.8	126.5	-	440.3	66.9	16.0	16.6	99.5	539.8
Bioscience Area Office	-	-	-	-	-	3.6	-	3.6	3.6
Biological Systems & Energy	66.4	37.9	-	104.3	-	5.6	6.6	12.2	116.5
Environmental Genomics & System Biology	49.2	28.5	-	77.8	66.9	-	8.9	75.7	153.5
Joint Genome Institute	179.7	0.5	-	180.2	-	1.0	0.1	1.1	181.3
Molecular Biophysics & Integrated Bioimaging	18.5	59.6	-	78.1	-	5.8	1.0	6.9	84.9
Computing Sciences	202.7	50.0	-	252.7	36.2	-	14.2	50.4	303.1
Computing Sciences ALD	0.1	-	-	0.1	15.9	-	0.1	16.0	16.1
Computational Research	67.2	46.0	-	113.2	11.0	-	11.8	22.8	136.0
National Energy Research Scientific Computing Center	86.6	3.4	-	89.9	6.9	-	2.3	9.1	99.1
Scientific Networking	48.9	0.6	-	49.6	2.4	-	-	2.4	52.0
Directorate & Operations	19.8	0.7	9.1	29.6	33.5	29.6	651.6	714.6	744.2
Laboratory Directorate	0.1	0.2	-	0.2	-	3.0	71.5	74.5	74.7
Environment, Health, and Safety	0.1	-	-	0.1	-	-	96.2	96.2	96.3
Facilities	10.6	-	9.1	19.7	22.1	2.2	188.6	212.9	232.6
Human Resources	1.3	0.0	-	1.3	-	-	55.4	55.4	56.7
Information Technology	7.8	0.5	-	8.3	11.4	24.1	81.8	117.3	125.5
Office of the Chief Financial Officer	-	0.0	-	0.0	-	0.3	138.2	138.5	138.5
Operations	-	-	-	-	-	-	19.9	19.9	19.9

Notes: Minor variances may occur due to rounding. FTEs are calculated based on translating labor hours charged into work-months and dividing by division's PLF factor. FTE calculation does not include Contract Labor or Campus Labor. Total FTE excludes 40.0 FTEs from non-contract projects (CSRUC, IJE, IPA, MLA, Royalties, and UC Construction Projects).

(a) Other Operating includes DOE Integrated Contractors, Non-DOE Fellowships, and CRADAs.

(b) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only.

(c) Operations Overhead includes: G&A, LDRD, Site Support, Payroll Burden, Procurement, Travel, IGPP, S&S, and LBNL's Office of Homeland Security.

continued...

Average FTE Breakdown by Area and Division, FY2018 Continued

Division/ALD	Direct Funded FTEs				Indirect Funded FTEs				Total FTEs
	DOE Direct Operating	Other Direct Operating (a)	Capital & Equipment	Direct Funded Total	ALD/ ORG Burden	Service Centers (b)	Operations Overhead (c)	Indirect Funded Total	
Earth & Environmental Sciences	124.8	36.5	0.1	161.4	20.9	0.1	10.5	31.5	193.0
Earth & Environmental Science ALD	-	0.0	-	0.0	20.9	0.1	0.1	21.1	21.2
Climate & Ecosystems	73.6	15.4	0.1	89.1	-	-	4.3	4.3	93.4
Energy Geosciences	51.2	21.1	-	72.3	-	-	6.0	6.0	78.3
Energy Sciences	463.9	46.4	8.9	519.1	44.1	0.6	20.2	64.9	584.0
Energy Sciences ALD	-	-	-	-	2.8	-	-	2.8	2.8
Advanced Light Source	189.7	1.4	8.8	199.9	10.8	-	2.8	13.6	213.4
Chemical Sciences	88.7	6.4	-	95.1	11.3	-	5.7	17.0	112.1
Molecular Foundry	80.5	18.0	0.0	98.6	8.4	-	4.5	12.9	111.5
Materials Sciences	104.9	20.6	-	125.6	10.9	0.6	7.2	18.7	144.3
Energy Technologies	197.4	67.6	-	265.0	36.4	19.0	13.7	69.1	334.1
ETA Area Office	2.8	-	-	2.8	36.4	-	-	36.4	39.2
Building Technology & Urban Systems	48.9	26.8	-	75.7	-	7.5	2.4	9.9	85.6
Cyclotron Road	5.3	0.4	-	5.7	-	-	-	-	5.7
Energy Analysis & Environmental Impacts	73.4	24.2	-	97.7	-	6.9	4.0	10.9	108.6
Energy Storage & Distributed Resources	67.0	16.2	-	83.2	-	4.6	7.3	11.9	95.0
Physical Sciences	185.9	54.3	44.6	284.8	52.4	7.8	27.1	87.3	372.2
Physical Sciences ALD	0.2	-	-	0.2	1.7	-	-	1.7	1.9
Accelerator Technology & Applied Physics	49.7	25.6	18.3	93.6	8.9	0.1	4.0	13.0	106.6
Engineering	-	3.6	0.0	3.6	22.6	6.9	6.3	35.8	39.4
Nuclear Science	57.1	19.6	5.0	81.8	9.3	0.9	7.2	17.4	99.2
Physics	78.9	5.5	21.2	105.6	9.9	-	9.6	19.5	125.1
GRAND TOTAL	1,508.4	382.0	62.6	1,953.0	290.4	73.2	753.8	1,117.4	3,070.4

Notes: Minor variances may occur due to rounding. FTEs are calculated based on translating labor hours charged into work-months and dividing by division's PLF factor. FTE calculation does not include Contract Labor or Campus Labor. Total FTE excludes 40.0 FTEs from non-contract projects (CSRUC, IJE, IPA, MLA, Royalties, and UC Construction Projects).

(a) Other Operating includes DOE Integrated Contractors, Non-DOE Fellowships, and CRADAs.

(b) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only.

(c) Operations Overhead includes: G&A, LDRD, Site Support, Payroll Burden, Procurement, Travel, IGPP, S&S, and LBNL's Office of Homeland Security.

Funds Held for Others Cost Trends, FY2014-FY2018 (\$K)

Funding Source	FY2014	FY2015	FY2016	FY2017	FY2018
Royalty	3,420	3,031	3,465	3,240	2,793
Contractor-Funded Institutional Supporting R&D & Gifts	3,381	3,826	4,026	3,050	3,135
Inter-Location Appointments (ILA)	3,215	4,093	3,664	2,957	2,970
UC Construction Projects	1,887	2,188	455	185	-
Other	109	192	20	252	161
Total	12,012	13,330	11,630	9,684	9,059
Note: UC Construction costs decreased by 79% (or \$1,733K) in FY 16, primarily due to the completion of CRT and SERC buildings.					

DIRECT FUNDING — DOE & REIMBURSABLE WORK

2

Total Laboratory Funding and Costs

Total Laboratory Funding - \$1,098M

FY2018 was an exciting year of growth and opportunity at the laboratory. For the first time in its history, Berkeley Lab's funding exceeded \$1B. The \$150M increase over FY2017 is reflective of the trust that Congress and the Department of Energy place in the employees of the laboratory as stewards of the Lab's resources, committed to its scientific mission.

The Office of Science contributed \$120M of the funding increase, largely related to investments in scientific and facility infrastructure. Most notable are the following:

- Advanced Scientific Computing Research (ASCR) increased \$36M, driven in large part by an increase in funding to support ESnet, the Department of Energy's dedicated science network.
- Basic Energy Sciences (BES) increased \$29M as the Advanced Light Source Upgrade (ALS-U) received CD-1 approval.
- High Energy Physics (HEP) provided a \$26M increase in support of efforts related to the Dark Energy Spectroscopic Instrument (DESI), LUX-ZEPLIN (LZ), and Berkeley Lab Laser Accelerator (BELLA).
- Science Laboratories Infrastructure (SLI) provided an increase of \$26M, including \$19M for the final year of funding for the Integrative Genomics Building (IGB), as well as a \$7M increase in General Purpose Plant funds.

Outside of the Office of Science, the largest contributor to the funding increase was Environmental Management (\$32M) for the cleanup of legacy waste. Moderate increases in Energy Efficiency and Renewable Energy (\$4M) and Fossil Energy (\$5M) were offset by decreases in ARPA E (\$9M), Electricity Delivery (\$3M) and International Affairs (\$3M).

While funding from other Federal and Non-Federal sponsors remained relatively flat, work with DOE Integrated Contractors continues to increase (\$6M). This was driven primarily by efforts related to the upgrade of the Linac Coherent Light Source (LCLS-II) at SLAC, as well as the collaboration across the DOE complex on the Exascale Computing Project.

The increase in funding enables Lawrence Berkeley National Laboratory to remain a leader in fundamental science, and to continue a long and celebrated history of bringing science solutions to the world.

Total Laboratory Costs - \$907M

Laboratory costs in FY2018 were \$907M, approximately \$49M greater than FY2017.

Office of Science costs increased by \$42M overall, largely in the area of capital spending. This reflects a \$27M increase related to the construction of the Integrative Genomics Building (IGB), as well as a \$5M increase in General Plant Projects, both funded by the Science Laboratories Infrastructure (SLI) Program. Spending related to Major Items of Equipment also increased by \$8M due to continued progress on Dark Energy Spectroscopic Instrument (DESI) and LUX-ZEPLIN (LZ), funded by High Energy Physics (HEP). Finally, capital spending at National Energy Research Scientific Computing Center (NERSC) was up \$6M over FY2017.

The Office of Science capital spending increases were partially offset by an overall reduction in operating spending. While the Laboratory experienced growth in Basic Energy Sciences (\$7M), primarily due to the ramp up of Advanced Light Source Upgrade (ALS-U), this was offset by a decrease in Biological Environmental Research (\$13M), as spending at the Joint Genome Institute (JGI) and the Joint BioEnergy Institute (JBEI) dropped slightly as compared to FY2017.

Modest increases in the area of Sponsored research included a \$5M increase in work with Non-Federal sponsors and a \$6M increase in work with DOE Integrated Contractors.

Refer to Section 1, Institutional Information, for more information regarding how Program dollars were spent in FY2018.

Historical Trends: Funding, Cost and Carryover

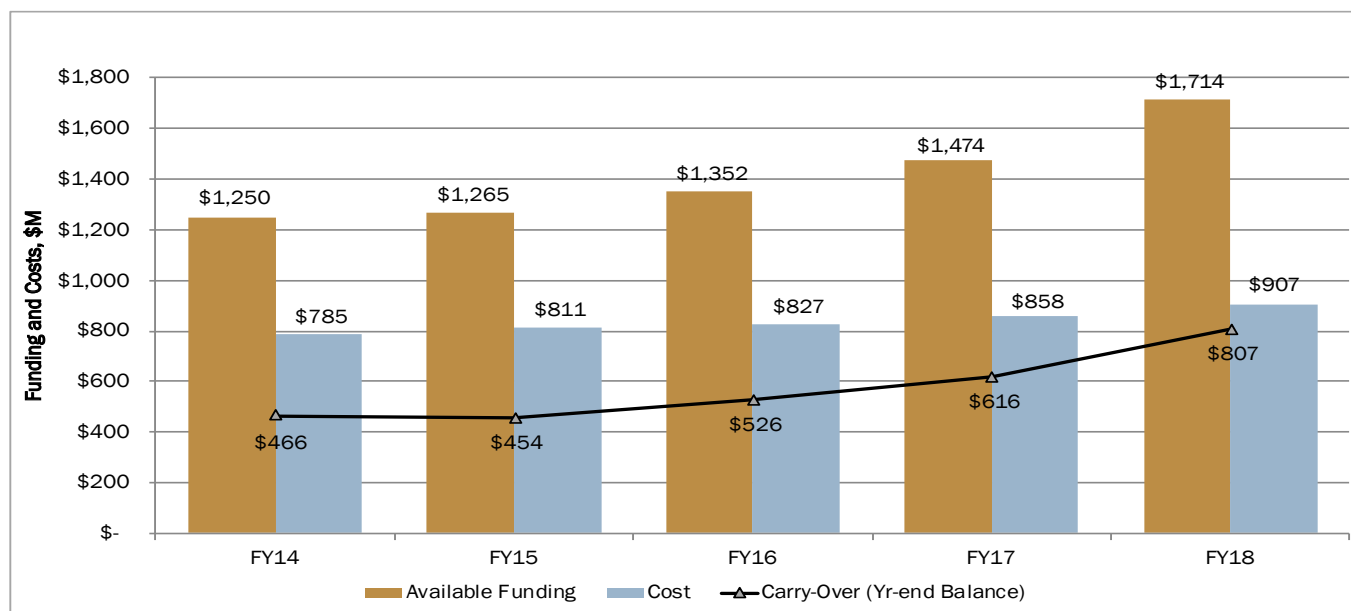


Table 2.1

Berkeley Lab Funding Trends (BA) by Funding Source (\$K)

Berkeley Lab Cost Trends by Funding Source (\$K)	FY2014	FY2015	FY2016	FY2017	FY2018
DOE DIRECT OPERATING					
Administrator for National Nuclear Security Administration	7,187	14,130	13,369	10,853	9,918
Advanced Research Projects Agency - Energy	993	1,779	3,033	9,276	580
Assistant Secretary for Electricity Delivery & Energy Reliability	7,873	8,106	10,145	10,289	7,002
Assistant Secretary for Energy Efficiency and Renewable Energy	69,471	61,016	91,435	106,908	111,062
Assistant Secretary for Environmental Management	18,824	863	16,715	9,072	40,900
Assistant Secretary for Fossil Energy	6,384	7,799	7,263	13,972	18,829
Assistant Secretary for Nuclear Energy	3,040	2,414	2,519	3,596	3,396
Assistant Secretary for International Affairs	425	2,958	3,773	3,826	473
Loan Programs Office	(0)	-	-	-	-
Office of Energy and Threat	177	158	179	226	86
Office of Energy Policy & Systems Analysis	200	2,066	1,862	650	(2)
Office of Environment, Health, Safety and Security	48	1,540	310	40	525
Office of Indian Energy Policy & Programs	229	-	35	-	-
Office of Legacy Management	-	195	169	250	-
Office of Management	(1)	-	-	-	-
Office of Science	527,907	533,386	548,159	558,594	613,485
Office of the Chief Information Officer	-	-	200	-	-
Total DOE Direct Operating	642,758	636,409	699,165	727,551	806,255
OTHER DIRECT OPERATING					
Federal Agencies	55,953	53,330	51,519	49,042	47,924
Non-Federal Sponsors (a)	51,967	55,066	52,376	55,063	56,152
Cooperative Research and Development Agreements	1,019	2,175	2,588	2,685	2,936
DOE Integrated Contractors (b)	18,884	19,292	23,328	41,444	47,432
Total Other Direct Operating	127,824	129,864	129,810	148,234	154,444
TOTAL OPERATING	770,582	766,274	828,975	875,786	960,700
Note: Minor variances may occur due to rounding. Data Source: Budget Authority as provided in the Berkeley Lab final contract modification for the fiscal year. (a) Includes both funding and deobligations for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program. (b) Total funding for Integrated Contractors is assumed to be equal to cost incurred.					

continued...

Berkeley Lab Funding Trends (BA) by Funding Source (\$K) Continued

Berkeley Lab Fund Trends (BA) by funding source (\$K)	FY2014	FY2015	FY2016	FY2017	FY2018
DOE PLANT AND CAPITAL EQUIPMENT					
Basic Equipment/Major Items of Equipment					
Administrator for National Nuclear Security Administration	-	2,570	1,375	1,428	1,190
Assistant Secretary for Energy Efficiency and Renewable Energy	(0)	900	990	-	-
Office of Science	12,514	14,076	39,889	39,915	56,585
Total DOE Capital Equipment	12,514	17,546	42,254	41,342	57,775
General Plant Projects					
Office of Science	(13)	(0)	-	9,000	16,400
Accelerator Improvement Projects					
Office of Science	1,250	1,800	1,000	2,000	8,700
Line-Item Construction					
Assistant Secretary for Energy Efficiency and Renewable Energy	-	(0)	-	-	-
Office of Science	(8)	12,090	25,250	20,098	54,333
Total DOE Plant	1,228	13,890	26,250	31,098	79,433
TOTAL DOE PLANT AND CAPITAL EQUIPMENT	13,742	31,436	68,504	72,440	137,209
TOTAL LABORATORY	784,324	797,710	897,479	948,226	1,097,908

Berkeley Lab Cost Trends by Funding Source (\$K)

Berkeley Lab Cost Trends by Funding Source (\$K)	FY2014	FY2015	FY2016	FY2017	FY2018
DOE DIRECT OPERATING					
Administrator for National Nuclear Security Administration	9,886	11,764	13,698	11,404	8,956
Advanced Research Projects Agency - Energy	3,074	1,609	1,614	2,623	4,392
Assistant Secretary for Electricity Delivery & Energy Reliability	8,517	9,635	9,136	8,639	7,671
Assistant Secretary for Energy Efficiency and Renewable Energy	75,239	73,493	76,135	80,750	78,272
Assistant Secretary for Environmental Management	5,327	7,828	9,858	15,987	16,187
Assistant Secretary for Fossil Energy	6,586	8,020	8,037	8,083	9,134
Assistant Secretary for Nuclear Energy	2,574	2,359	2,728	2,096	2,417
Assistant Secretary for International Affairs	330	189	1,461	2,865	3,374
Office of Energy and Threat	168	174	182	167	147
Office of Energy Policy & Systems Analysis	200	419	2,296	934	641
Office of Environment, Health, Safety and Security	35	229	1,264	388	42
Office of Indian Energy Policy & Programs	-	128	134	1	0
Office of Legacy Management	123	119	215	58	141
Office of Science	505,965	551,302	526,749	523,098	517,636
Office of the Chief Information Officer	-	-	8	110	81
Total DOE Direct Operating	618,024	667,268	653,515	657,202	649,093
OTHER DIRECT OPERATING					
Federal Agencies	60,725	57,036	49,724	48,131	46,674
Non-Federal Sponsors (a)	54,690	49,131	54,112	54,923	60,252
Cooperative Research and Development Agreements	1,095	2,114	2,469	2,446	2,366
DOE Integrated Contractors	18,884	19,292	23,328	41,444	47,432
Total Other Direct Operating	135,394	127,573	129,633	146,943	156,723
TOTAL OPERATING	753,418	794,841	783,148	804,145	805,816
DOE PLANT AND CAPITAL EQUIPMENT					
Basic Equipment/Major Items of Equipment					
Administrator for National Nuclear Security Administration	-	716	3,021	1,597	1,146
Assistant Secretary for Energy Efficiency and Renewable Energy	-	884	1,005	(0)	-
Office of Science	20,004	9,855	28,759	32,334	48,791
Total DOE Capital Equipment	20,004	11,456	32,785	33,930	49,937
General Plant Projects					
Office of Science	552	514	62	2,009	7,010
Accelerator Improvement Projects					
Office of Science	3,430	2,120	2,345	731	460
Line-Item Construction					
Assistant Secretary for Energy Efficiency and Renewable Energy	3,991	170	-	-	-
Office of Science	3,521	2,174	8,558	17,300	43,962
Total DOE Plant	11,495	4,979	10,966	20,040	51,432
TOTAL DOE PLANT AND CAPITAL EQUIPMENT	31,499	16,434	43,751	53,970	101,369
TOTAL LABORATORY (b)	784,917	811,276	826,899	858,115	907,185
Note: Minor variances may occur due to rounding. Data Source: Berkeley Lab published Fiscal Year End Costs. (a) Includes costs for Non-Federal Sponsors who are precluded by law from paying an advance under the WN program. (b) FY2018 costs do not include various adjustments. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2018 is \$1,281K.					

Berkeley Lab Funding and Costs by Funding Source (\$K)

Funding and Cost by Source (\$K)	FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
DOE DIRECT OPERATING				
Administrator for National Nuclear Security Administration	6,939	9,918	8,956	7,901
Advanced Research Projects Agency - Energy	10,433	580	4,392	6,620
Assistant Secretary for Electricity Delivery & Energy Reliability	13,085	7,002	7,671	12,416
Assistant Secretary for Energy Efficiency & Renewable Energy	89,505	111,062	78,272	122,294
Assistant Secretary for Environmental Management	25,638	40,900	16,187	50,351
Assistant Secretary for Fossil Energy	14,707	18,829	9,134	24,401
Assistant Secretary for Nuclear Energy	2,373	3,396	2,417	3,352
Assistant Secretary for International Affairs	6,339	473	3,374	3,438
Office of Energy & Threat	104	86	147	44
Office of Energy Policy & Systems Analysis	968	(2)	641	326
Office of Environment, Health, Safety and Security	43	525	42	526
Office of Indian Energy Policy & Programs	0	-	0	0
Office of Legacy Management	250	-	141	109
Office of Science	284,233	613,485	517,636	380,082
Office of the Chief Information Officer	82	-	81	1
Total DOE Direct Operating	454,699	806,255	649,093	611,861
OTHER DIRECT OPERATING				
Federal Agencies	49,134	47,924	46,674	50,657
Non-Federal Sponsors (a)	31,870	56,152	60,252	28,745
Cooperative Research and Development Agreements	1,044	2,936	2,366	1,647
DOE Integrated Contractors (b)	-	47,432	47,432	-
Total Other Direct Operating (c)	82,047	154,444	156,723	81,049
TOTAL OPERATING	536,746	960,700	805,816	692,911
Note: Minor variances may occur due to rounding. (a) Includes funding and deobligations for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program. (b) Total funding for Integrated Contractors is assumed to be equal to cost incurred. (c) The sum of FY2018 Beginning Uncosted Obligations, FY2018 Funds, minus, FY2018 Costs does not equal FY2018 Ending Uncosted due to various adjustments not reflected in the FY2018 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2018 is \$1,281K.				

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Berkeley Lab Funding and Costs by Funding Source (\$K) Continued

Funding and Cost by Source (\$K)	FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
DOE PLANT AND EQUIPMENT				
Basic Equipment/Major Items of Equipment				
Administrator for National Nuclear Security Administration	40	1,190	1,146	84
Assistant Secretary for Energy Efficiency & Renewable Energy	0	-	-	0
Office of Science	41,243	56,585	48,791	49,037
Total Capital Equipment	41,283	57,775	49,937	49,121
General Plant Projects				
Office of Science	6,999	16,400	7,010	16,389
Accelerator Improvement Projects				
Office of Science	2,248	8,700	460	10,488
Line-Item Construction				
Office of Science	29,583	54,333	43,962	39,954
TOTAL DOE PLANT	38,830	79,433	51,432	66,831
TOTAL DOE PLANT AND CAPITAL EQUIPMENT	80,113	137,209	101,369	115,953
TOTAL LABORATORY	616,859	1,097,908	907,185	808,863
Note: Minor variances may occur due to rounding.				

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FY2018 Funding and Costs by DOE Programs (\$K)

OFFICE OF SCIENCE		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
AT10	Burning Plasma Science: Foundations	593	565	545	613
AT40	Discovery Plasma Science	280	800	173	907
AT50	FES - Science	0	(0)	-	-
FS10	Safeguards and Security - Science	2,828	8,393	6,485	4,736
KA21	Energy Frontier Experimental Physics	4,567	11,980	11,283	5,264
KA22	Intensity Frontier Experimental Physics	641	2,552	1,971	1,222
KA23	Cosmic Frontier Experimental Physics	4,786	12,141	10,780	6,147
KA24	Theoretical and Computational Physics	3,209	7,286	4,977	5,519
KA25	Advanced Technology R&D	7,256	17,783	17,280	7,759
KA26	Accelerator Stewardship	918	1,948	809	2,057
KB01	Medium Energy Physics	588	465	503	550
KB02	Heavy-Ion Physics	1,934	6,096	4,488	3,542
KB03	Nuclear Theory	1,374	3,123	3,268	1,228
KB04	Low Energy Physics	2,950	11,081	9,322	4,709
KC02	Materials Sciences and Engineering	14,760	31,544	24,862	21,442
KC03	Chemical Sciences, Geosciences, and Biosciences	22,999	36,618	34,802	24,815
KC04	Scientific User Facilities	26,373	112,484	102,118	36,739
KJ04	Mathematical, Computational, and Computer Sciences Research	44,069	23,159	22,544	44,683
KJ05	High Performance Computing and Network Facilities	79,836	170,864	127,151	123,549
KL10	Internships and Visiting Faculty Activities at DOE Labs	588	1,090	770	908
KL15	Outreach	-	21	-	21
KP12	Climate Change Research	1	-	1	0
KP15	Biological Research	38	-	0	38
KP16	Biological Systems Science	35,722	122,583	106,561	51,744
KP17	Climate and Environmental Sciences	27,628	30,138	26,867	30,899
ST50	Isotope Research	296	762	76	982
ST60	Isotope Operations	-	7	-	7
Total Operating		284,233	613,485	517,636	380,082

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FY2018 Funding and Costs by DOE Programs (\$K) Continued

OFFICE OF SCIENCE			FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
CAPITAL EQUIPMENT						
AT40	Discovery Plasma Science		14	2,000	27	1,986
KA21	Energy Frontier Experimental Physics		-	4,450	899	3,551
KA22	Intensity Frontier Experimental Physics		577	-	571	7
KA23	Cosmic Frontier Experimental Physics		12,531	31,600	27,953	16,178
KA25	Advanced Technology R&D		834	1,500	1,850	484
KA26	Accelerator Stewardship		175	280	339	116
KB02	Heavy-Ion Physics		188	216	342	62
KB04	Low Energy Physics		3,612	4,697	2,394	5,914
KC02	Materials Sciences and Engineering		1,215	1,100	1,133	1,181
KC03	Chemical Sciences, Geosciences, and Biosciences		544	-	524	20
KC04	Scientific User Facilities		14,066	2,157	5,686	10,537
KJ05	High Performance Computing and Network Facilities		4,627	8,000	6,430	6,197
KP16	Biological Systems Science		2,861	587	643	2,804
Total Capital Equipment			41,243	56,585	48,791	49,037
GENERAL PLANT PROJECTS						
FS10	Safeguards and Security - Science		0	(0)	-	-
KG07	Facilities and Infrastructure		6,999	16,400	7,010	16,389
Total General Plant Projects			6,999	16,400	7,010	16,389
ACCELERATOR IMPROVEMENT PROJECTS						
KA25	Advanced Technology R&D		-	7,700	16	7,684
KC04	Scientific User Facilities		2,248	1,000	444	2,804
Total Accelerator Improvement Projects			2,248	8,700	460	10,488
LINE-ITEM CONSTRUCTION						
39KA	High Energy Physics		17	(17)	0	0
39KC	Basic Energy Sciences		-	16,000	-	16,000
39KG	Science Laboratories Infrastructure		29,566	38,350	43,962	23,954
Total Line-Item Construction			29,583	54,333	43,962	39,954
Total DOE Plant			38,830	79,433	51,432	66,831
TOTAL OFFICE OF SCIENCE			364,306	749,504	617,859	495,950
Note: Minor variances may occur due to rounding.						

continued...

FY2018 Funding and Costs by DOE Programs (\$K) Continued

ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
BM01	Biomass/Biofuels Energy Systems	7,620	15,098	7,506	15,212
BT01	Residential Buildings Integration	1,239	1,743	1,855	1,127
BT02	Commercial Buildings Integration	5,408	7,499	3,478	9,430
BT03	Emerging Technologies	10,488	17,937	8,899	19,526
BT04	Equipment and Buildings Standards	14,950	13,468	10,134	18,284
BT08	EE Building Systems Design Energy Innovation Hubs	0	-	-	0
EB21	Solar Energy	17	-	-	17
EB40	Geothermal Technologies	70	-	25	45
EB42	Hydrogen Research R&D	1	(1)	-	-
EB57	Energy Efficiency and Renewable Energy (EERE) Program Support	24	(0)	4	20
ED19	Industries Of The Future (Crosscutting)	2	(0)	2	0
ED20	Industrial Technical Assistance	3,904	6,500	5,740	4,664
ED27	Next Generation Manufacturing R&D Projects	8,889	2,825	5,908	5,806
ED28	Advanced Manufacturing R&D Facilities	0	(0)	-	-
EL17	Federal Energy Management Program	2,394	7,027	2,891	6,531
GT01	Enhanced Geothermal Systems	4,852	4,037	4,402	4,488
GT02	Low Temperature and Co-produced Resource	651	390	465	577
GT03	Hydrothermal	1,658	-	1,160	498
GT04	Systems Analysis	27	85	15	98
HT01	Fuel Cell Systems R&D	784	1,770	1,383	1,170
HT02	Hydrogen Fuel R&D	1,762	4,789	2,859	3,692
HT05	Safety, Codes & Standards	0	(0)	-	-
HT07	Manufacturing R&D	279	-	246	34
HT08	Technology Validation	238	-	232	6
HT11	Technology Acceleration	558	300	198	660
PG03	Strategic Priorities and Impact Analysis	933	1,030	708	1,256
PG04	Technology-to-Market	953	-	54	899
PG05	International	266	49	275	40
SL01	Concentrating Solar Power	14	372	-	386
SL02	Photovoltaic R&D	1,014	1,975	144	2,845
SL03	Systems Integration (Balance of Systems and Power Electronics)	6,470	378	2,782	4,066
SL04	Balance of Systems Soft Cost Reduction	2,928	2,925	1,195	4,657
SL05	Innovations in Manufacturing Competitiveness	42	-	34	7
VT02	Outreach	613	100	513	200
VT04	Advanced Combustion and Engine R&D	0	75	8	67
VT05	Materials Technology	72	-	72	0
VT06	Fuels Technology	148	-	38	110
VT12	Batteries and Electrification Technologies	5,146	10,785	9,105	6,826
VT13	Vehicle & Systems Simulation and Testing	2,665	2,800	2,912	2,553
WC01	Water Power Program	1	40	26	14

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FY2018 Funding and Costs by DOE Programs (\$K) Continued

ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY (Continued)		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
WI03	State Energy Program (Grants)	820	810	354	1,276
WI04	Other State Energy Activities	0	(0)	-	-
WI06	Intergovernmental Activities	0	(0)	-	0
WI07	Weatherization Assistance Program	68	150	90	127
WI12	Weatherization Innovation	0	-	-	0
WW02	Technology Viability	32	-	-	32
WW03	Technology Application	0	-	-	0
WW08	Mitigate Market Barriers	534	424	296	662
WW09	Modeling & Analysis	968	1,466	1,015	1,419
VT18	Analysis	-	370	54	316
VT15	Energy Efficient Mobility Systems	-	3,109	752	2,357
WW06	Technology RD&T and Resource Characterization	-	736	445	291
Total Operating		89,505	111,062	78,272	122,294
CAPITAL EQUIPMENT					
BT04	Equipment and Buildings Standards	0	-	-	0
ED27	Next Generation Manufacturing R&D Projects	0	-	-	0
Total Capital Equipment		0	0	0	0
TOTAL DOE PLANT		0	0	0	0
TOTAL ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY		89,505	111,062	78,272	122,294
Note: Minor variances may occur due to rounding.					
ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
EY40	Defense Site Acceleration Completion - Technology Development and Deployment	73	250	145	178
EY80	Defense Environmental Cleanup - Program Support	0	-	-	0
EZ50	Non-Defense Environmental Cleanup - Small Sites	25,565	40,650	16,042	50,173
Total Operating		25,638	40,900	16,187	50,351
TOTAL ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT		25,638	40,900	16,187	50,351
Note: Minor variances may occur due to rounding.					

continued...

FY2018 Funding and Costs by DOE Programs (\$K) Continued

ASSISTANT SECRETARY FOR FOSSIL ENERGY		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
AA15	Advanced Research	0	(0)	0	-
AA20	Central Systems	1	(1)	-	-
AA30	Sequestration	169	769	50	888
AA60	Advanced Energy Systems	146	(0)	114	32
AA65	Carbon Capture	1,463	6,231	1,017	6,677
AA70	Carbon Storage	8,118	5,878	4,035	9,961
AA90	Cross Cutting Research	3,169	2,570	2,296	3,443
AB05	Natural Gas Technologies	817	1,000	819	998
AB05	Gas	650	720	567	802
AC10	Oil Technology	68	-	4	64
AD20	Contractual Services And Supplies	14	-	14	0
BD00	Unconventional Fossil Energy Technologies	92	1,662	218	1,535
CE03	Center for Zero Emissions Technology - Montana State	0	-	-	0
CE54	Design and Test of an Advanced SOFC Generator in PA	0	(0)	-	-
Total Operating		14,707	18,829	9,134	24,401
TOTAL ASSISTANT SECRETARY FOR FOSSIL ENERGY		14,707	18,829	9,134	24,401
Note: Minor variances may occur due to rounding.					
ADMINISTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
CT84	Emergency Response	92	1,110	1,034	168
DN20	DNN Research and Development	1,688	6,374	5,814	2,248
DN40	Nonproliferation and Arms Control	337	613	759	191
DP09	Infrastructure and Operations (formerly RTBF)	2,874	1,100	797	3,176
DP13	Engineering	-	175	11	164
DP15	Advanced Simulation and Computing	40	-	-	40
DP40	Nuclear Counterterrorism Incident Response	0	-	-	0
M001	Cyber Security	1,903	-	97	1,807
M002	Enterprise Security Computing	-	546	440	106
NN20	Defense Nuclear Nonproliferation Research and Development (DNN R&D)	6	-	5	0
NN40	Nonproliferation and International Security (NIS)	(0)	-	-	(0)
Total Operating		6,939	9,918	8,956	7,901
CAPITAL EQUIPMENT					
DN20	DNN Research and Development	40	1,190	1,146	84
Total Capital Equipment		40	1,190	1,146	84
TOTAL ADMINISTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION		6,979	11,108	10,102	7,985
Note: Minor variances may occur due to rounding.					

continued...

FY2018 Funding and Costs by DOE Programs (\$K) Continued

ASSISTANT SECRETARY FOR ELECTRICITY DELIVERY AND ENERGY RELIABILITY		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
TD50	Research and Development	0	(0)	-	(0)
TD54	OPERATIONS & ANALYSIS	0	-	-	0
TE11	Transmission Reliability	4,240	2,758	2,519	4,479
TE11	Energy Systems Predictive Capability	175	-	78	96
TE12	Resilient Distribution Systems	1,948	1,429	1,767	1,609
TE13	Cyber Security for Energy Delivery Systems	724	300	298	726
TE14	Energy Storage	1,208	84	408	884
TE15	Transformer Resilience & Advanced Components	273	-	125	149
TF00	Transmission Permitting and Technical Assistance	4,442	2,431	2,470	4,403
TG01	Infrastructure Security and Energy Restoration	75	-	5	70
Total Operating		13,085	7,002	7,671	12,416
TOTAL ASSISTANT SECRETARY FOR ELECTRICITY DELIVERY AND ENERGY RELIABILITY		13,085	7,002	7,671	12,416
Note: Minor variances may occur due to rounding.					
ASSISTANT SECRETARY FOR NUCLEAR ENERGY		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
AF58	Fuel Cycle Research and Development (FCR&D)	2,067	3,396	2,399	3,064
DF01	First Repository	15	-	-	15
NT05	Nuclear Energy Advanced Modeling and Simulation	291	-	17	274
Total Operating		2,373	3,396	2,417	3,352
TOTAL ASSISTANT SECRETARY FOR NUCLEAR ENERGY		2,373	3,396	2,417	3,352
Note: Minor variances may occur due to rounding.					
ADVANCED RESEARCH PROJECTS AGENCY - ENERGY		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
CJ01	ARPA-E Projects	10,426	575	4,392	6,608
CJ02	Program Direction	7	5	-	12
Total Operating		10,433	580	4,392	6,620
TOTAL ADVANCED RESEARCH PROJECTS AGENCY - ENERGY		10,433	580	4,392	6,620
Note: Minor variances may occur due to rounding.					

FY2018 Funding and Costs by DOE Programs (\$K) Continued

OFFICE OF ENVIRONMENT, HEALTH, SAFETY AND SECURITY		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
HQ10	Employee Compensation	10	25	25	10
HU10	Corporate Safety Program	33	500	17	516
Total Operating		43	525	42	526
TOTAL OFFICE OF ENVIRONMENT, HEALTH, SAFETY AND SECURITY		43	525	42	526
Note: Minor variances may occur due to rounding.					
ASSISTANT SECRETARY FOR INTERNATIONAL AFFAIRS		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
PE04	Office Of Environmental Analysis	0	(0)	-	0
PE06	Climate Change Technology Program - International	0	(0)	-	-
WA22	Office of International Affairs - Program Direction	6,338	473	3,374	3,437
Total Operating		6,339	473	3,374	3,437
TOTAL ASSISTANT SECRETARY FOR INTERNATIONAL AFFAIRS		6,339	473	3,374	3,437
Note: Minor variances may occur due to rounding.					
OFFICE OF ENERGY AND THREAT		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
GD50	Cyber	2	-	-	2
GD60	Energy and Threat - Program	103	86	147	42
Total Operating		104	86	147	44
TOTAL OFFICE OF ENERGY AND THREAT		104	86	147	44
Note: Minor variances may occur due to rounding.					
OFFICE OF LEGACY MANAGEMENT		FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING					
LM01	Legacy Management Activities - Defense	250	-	141	109
Total Operating		250	0	141	109
TOTAL OFFICE OF LEGACY MANAGEMENT		250	0	141	109
Note: Minor variances may occur due to rounding.					

continued...

FY2018 Funding and Costs by DOE Programs (\$K) Continued

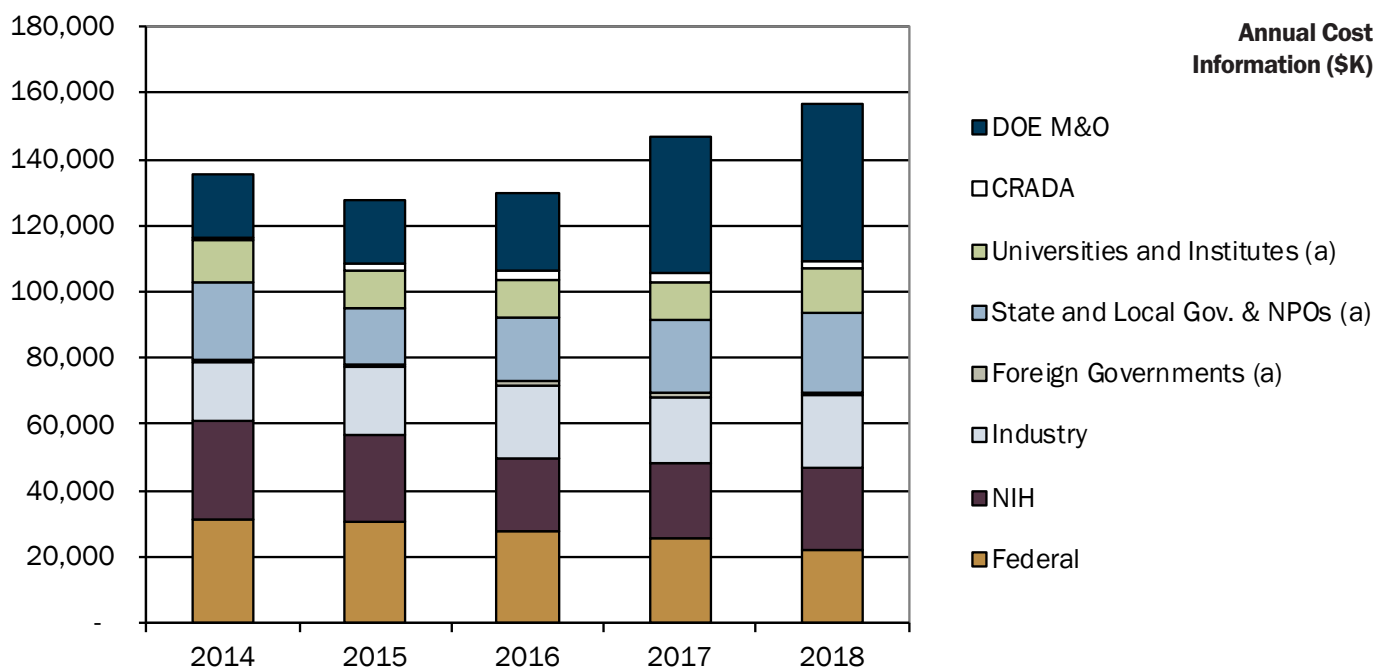
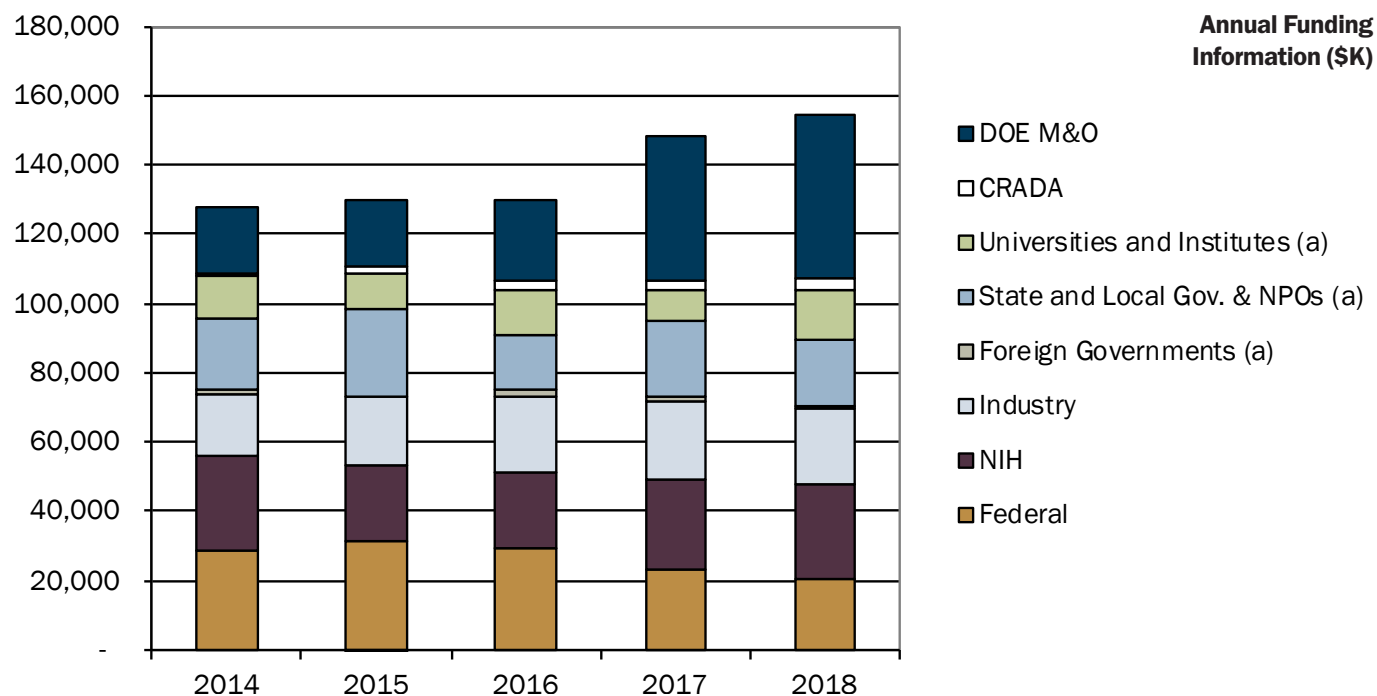
OFFICE OF ENERGY POLICY & SYSTEMS ANALYSIS			FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING						
EP01	EPSA Program Direction		968	(1)	641	326
PE01	Policy, Planning and Analysis		0	-	-	0
Total Operating			968	(1)	641	326
TOTAL OFFICE OF ENERGY POLICY & SYSTEMS ANALYSIS			968	(1)	641	326
Note: Minor variances may occur due to rounding.						
OFFICE OF THE CHIEF INFORMATION OFFICER			FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING						
CS70	Integrated Joint Cybersecurity Coordination Center (IJCC3)		82	-	81	1
Total Operating			82	0	81	1
TOTAL OFFICE OF THE CHIEF INFORMATION OFFICER			82	-	81	1
Note: Minor variances may occur due to rounding.						
OFFICE OF INDIAN ENERGY POLICY & PROGRAMS			FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
OPERATING						
IP10	Salaries & Benefits		0	-	0	0
IP20	Support Services		0	-	0	0
Total Operating			0	0	0	0
TOTAL OFFICE OF INDIAN ENERGY POLICY & PROGRAMS			0	0	0	0
Note: Minor variances may occur due to rounding.						
All DOE Programs (\$K)			FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
TOTAL OPERATING			454,699	806,255	649,093	611,861
TOTAL CAPITAL EQUIPMENT			41,283	57,775	49,937	49,121
TOTAL GENERAL PLANT PROJECTS			6,999	16,400	7,010	16,389
TOTAL ACCELERATOR IMPROVEMENT PROJECTS			2,248	8,700	460	10,488
TOTAL LINE ITEM CONSTRUCTION			29,583	54,333	43,962	39,954
TOTAL FUNDING AND COSTS			534,811	943,464	750,461	727,814
Note: Minor variances may occur due to rounding.						

FY2018 Funding and Costs by Other Direct Operating Source (\$K)

Funding Source	FY2018 Beginning Uncosted Obligations	FY2018 Funds	FY2018 Costs	FY2018 Ending Uncosted Obligations
REIMBURSABLE WORK				
Federal Agencies				
Department of Agriculture	48	(0)	13	35
Department of Defense	10,898	9,710	11,582	9,149
Department of Homeland Security - Borders and Transportation	81	(79)	2	-
Department of Homeland Security - Domestic Nuclear Detection Office	3,203	2,509	3,010	2,702
Department of Homeland Security - Science and Technology	1	(1)	-	-
Department of Housing And Urban Development	2	-	-	2
Department of State - Other	2,160	383	1,280	1,298
Department of The Interior	8	(1)	7	0
Department of Transportation	2	728	(0)	729
Environmental Protection Agency	666	544	743	488
National Aeronautics And Space Administration	3,250	3,779	3,833	3,307
National Institutes of Health	26,151	27,451	24,643	28,912
National Science Foundation	1	-	-	1
Nuclear Regulatory Commission	48	(19)	6	22
Other Federal Agencies	2,617	2,921	1,554	4,012
Total Federal Agencies	49,134	47,924	46,674	50,657
Non-Federal Agencies				
Foreign Governments (a)	949	1,034	1,242	776
Domestic and Foreign Industry	11,805	21,407	22,002	11,825
State and Local Governments & NPOs (a)	15,047	19,168	23,789	10,621
Universities and Institutes (a)	4,068	14,544	13,219	5,523
Total Non-Federal Agencies	31,870	56,152	60,252	28,745
Cooperative Research and Development Agreements				
CRADA - Other	1,010	2,552	2,001	1,595
CRADA - Small Business	34	384	365	52
Total Cooperative Research and Development Agreements	1,044	2,936	2,366	1,647
TOTAL REIMBURSABLE WORK	82,047	107,012	109,291	81,049
DOE INTEGRATED CONTRACTORS				
Work Performed for Other DOE Locations (b)	-	47,432	47,432	-
Total DOE Integrated Contractors	-	47,432	47,432	-
TOTAL OTHER DIRECT OPERATING (C)	82,047	154,444	156,723	81,049
Note: Minor variances may occur due to rounding. (a) Includes funding obligations and deobligations for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program. (b) Total funding for Integrated Contractors is assumed to be equal to cost incurred. (c) The sum of FY2018 Beginning Uncosted Obligations, FY2018 Funds, minus, FY2018 Costs does not equal FY2018 Ending Uncosted Obligations due to various adjustments not reflected in the FY2018 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2018 is \$1,281K.				

Figure 2.1

FY2018 Funding and Cost Trends by Other Direct Operating Source (\$K)



Note: Minor variances may occur due to rounding.

(a) Includes funding obligations and deobligations for Non-Federal sponsors precluded by law from paying an advance under the WN02 program.

Table 2.6

Total Funding Amounts by Area and Division for Each Fiscal Year (\$K)

ALDs & Divisions	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
BIOSCIENCES	174,359	173,539	166,741	179,747	183,508
Biological Systems & Energy	-	-	40,785	45,481	51,228
Environmental Genomics & System Biology	-	-	17,644	22,596	18,964
Joint Genome Institute	-	-	70,884	70,715	70,386
Molecular Biophysics & Integrated Bioimaging	-	-	37,429	40,956	42,930
Genomics	77,853	79,476	-	-	-
Life Sciences	32,395	29,174	-	-	-
Physical Biosciences	64,112	64,889	-	-	-
COMPUTING SCIENCES	146,947	165,127	174,134	189,990	231,880
Computational Research	-	42,698	33,671	43,737	51,844
National Energy Research Scientific Computing Center	-	81,773	96,973	93,814	96,181
Scientific Networking	-	40,656	43,489	52,439	83,855
Computing Sciences	146,947	-	-	-	-
EARTH & ENVIRONMENTAL SCIENCES	66,807	65,148	64,679	79,953	72,940
Climate & Ecosystems	-	-	38,843	42,308	39,452
Energy Geosciences	-	-	25,836	37,646	33,487
Earth Sciences	66,807	65,148	-	-	-
ENERGY SCIENCES	156,847	155,628	173,469	176,437	208,425
Advanced Light Source	63,188	66,238	74,439	74,279	97,548
Chemical Sciences	21,350	21,795	27,988	29,204	27,238
Material Sciences	72,309	67,596	71,043	37,195	43,334
Molecular Foundry	-	-	-	35,759	40,305
ENERGY TECHNOLOGIES	98,817	98,048	125,708	140,598	128,323
Building Technologies & Urban Systems	-	-	40,138	44,214	44,554
Cyclotron Road	-	-	2,345	3,982	1,750
Energy Analysis & Environmental Impacts	-	-	46,722	56,664	46,522
Energy Storage & Distributed Resources	-	-	36,502	35,738	35,497
Environmental Energy Technologies	98,817	98,048	-	-	-
PHYSICAL SCIENCES	117,514	122,725	147,270	134,738	167,653
Accelerator Technology & Applied Physics	28,540	36,986	37,461	43,386	56,326
Engineering	4,754	3,595	2,132	1,519	1,496
Nuclear Science	33,543	31,916	35,304	32,882	39,744
Physics	50,676	50,229	72,373	56,951	70,087
DIRECTORATE & OPERATIONS	23,033	17,495	45,477	46,763	105,180
Office of the Chief Financial Officer	(2,146)	(2,612)	(802)	(21)	-
Environment, Health, Safety & Security	7	-	-	-	-
Facilities	17,588	12,153	36,520	37,458	99,597
Human Resources	-	-	-	-	1,118
Information Technology	2,605	2,384	4,139	4,029	4,383
Laboratory Directorate	20	173	592	165	44
Operations	1,376	106	123	162	37
Protective Services	3,584	3,589	3,603	3,673	-
Public Affairs	-	1,702	1,302	1,298	-
GRAND TOTAL	784,324	797,710	897,479	948,226	1,097,908

INDIRECT BUDGETS

3

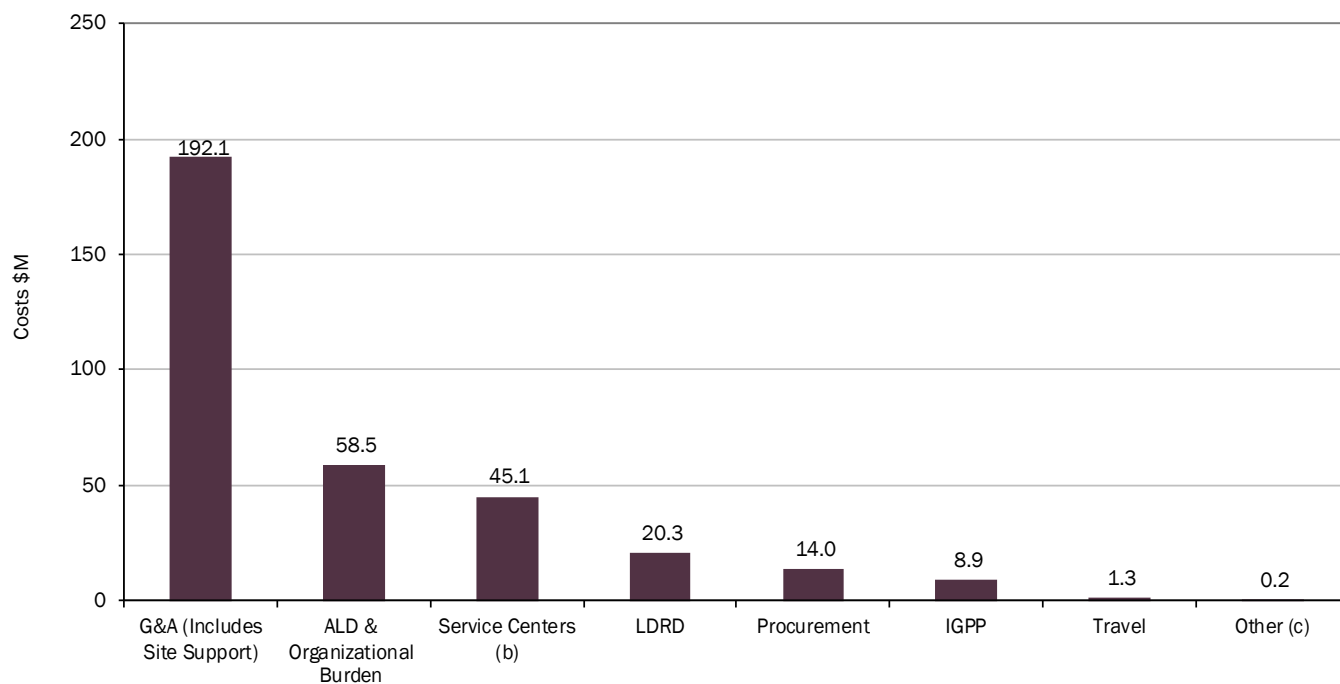
Indirect Budgets – FY2018 Costs (\$M)

Indirect Budgets (a)	FY2018 Costs (\$M)
G&A (Includes Site Support)	192.1
ALD & Organizational Burden	58.5
Service Centers (b)	45.1
LDRD	20.3
Procurement	14.0
IGPP	8.9
Travel	1.3
Other (c)	0.2
Total	340.5

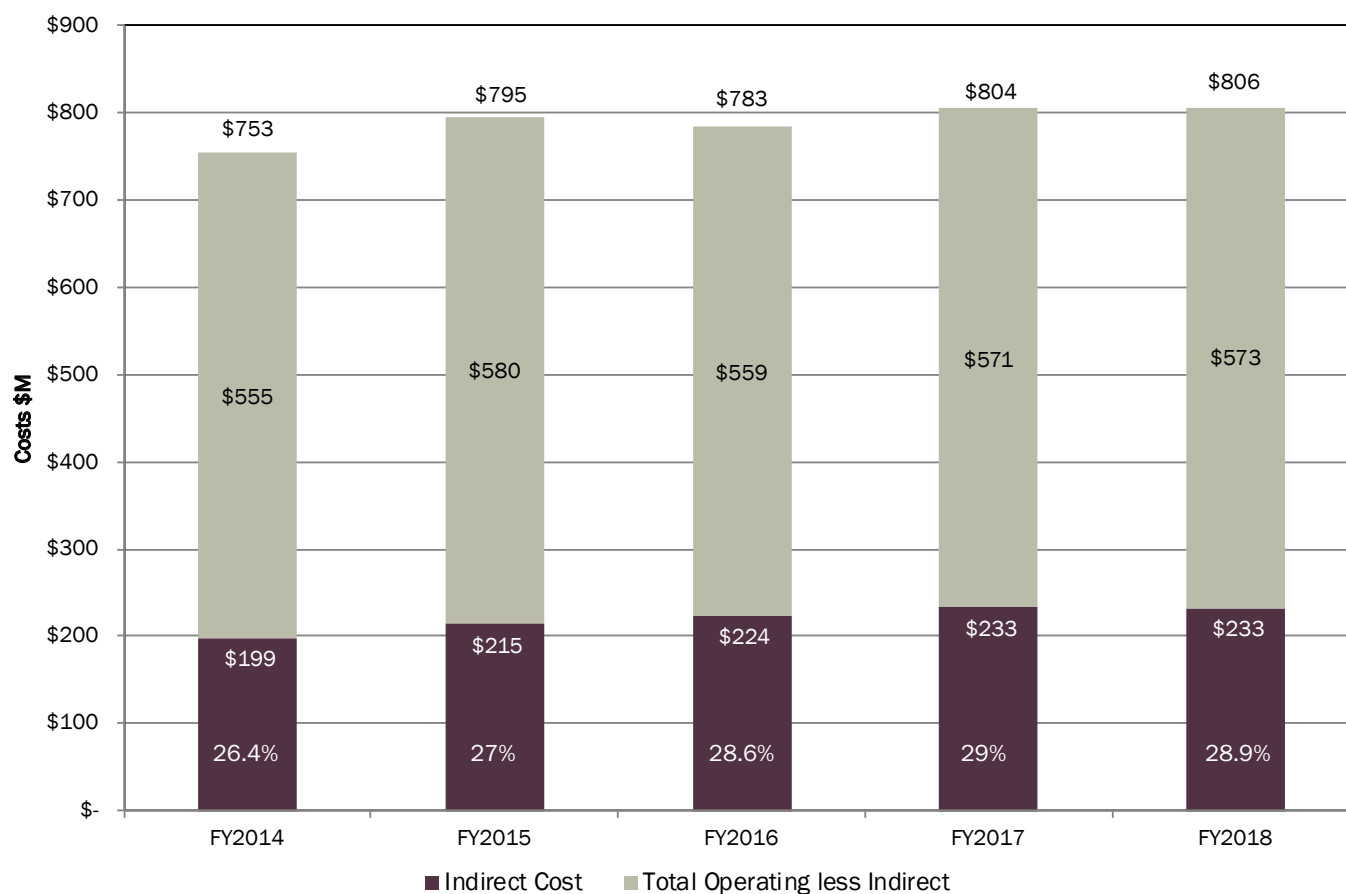
(a) Summation of indirect budget provided only to show magnitude of dollars being managed and does not equate to total indirect costs since there are overlaps between indirect budgets. For example, some organization burden costs are included in G&A and Recharges. In FY2018, LDRD cost includes \$3.9M G&A assessed on LDRD projects.

(b) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only.

(c) Includes Office of Homeland Security Charge.



Institutional Overhead Costs as a Percent of Operating Costs, FY2014-FY2018



Note: Chart represents the institutional cost structure for each fiscal year with adjustments for indirect double count of G&A on LDRD projects. Institutional overhead costs include G&A, Site Support, LDRD, Travel, Procurement, and IGPP. Percent is the percentage of indirect cost to total operating cost.

Total Operating Costs are used as the denominator in the chart above because this is more representative of ongoing scientific program costs. Including Construction and Equipment costs, which are generally procurement intensive and one-time in nature, would create significant anomalies in overhead comparisons for prior years. Thus, Construction and Capital Equipment costs are excluded from this chart. This differs from Table 1.1.

Table 3.1

Institutional Costs by Division, FY2018 (\$K)

Division	G&A (a)	LDRD (b)	Procurement	Travel	IGPP	Total
Lab Directorate	21,663					21,663
LDRD	-	20,317	-	-	-	20,317
Associate Lab Director for Operations						
Deputy Director for Operations	2,188	-	-	-	-	2,188
Project Management Office	1,115	-	-	-	-	1,115
Office of Institutional Assurance and Integrity	1,761	-	-	-	-	1,761
Environment, Health & Safety	22,995	-	-	-	-	22,995
Facilities	78,584	-	1,894	-	8,922	89,400
Human Resources	10,723	-	-	-	-	10,723
IT Division & BSC	32,944	-	-	-	-	32,944
OCFO	8,575	-	12,106	1,331	-	22,012
Engineering	2,375	-	-	-	-	2,375
Earth Sciences	18	-	-	-	-	18
General Lab	9,205	-	-	-	-	9,205
TOTAL	192,144	20,317	14,000	1,331	8,922	236,714
Note: Minor variances may occur due to rounding. (a) Includes Site Support & Strategic Planning Support Activities (SPSA). (b) LDRD costs include \$3.9M of G&A assessment.						

Table 3.2

Institutional FTEs Charged by Division, FY2018

Division	G&A (a)	LDRD (b)	Procurement	Travel	IGPP	Total
Lab Directorate	74.6	-	-	-	-	74.6
LDRD	-	92.6	-	-	-	92.6
Associate Lab Director for Operations	-	-	-	-	-	-
Deputy Director for Operations	7.1	-	-	-	-	7.1
Project Management Office	2.8	-	-	-	-	2.8
Office of Institutional Assurance and Integrity	10.0	-	-	-	-	10.0
Environment, Health & Safety	96.2	-	-	-	-	96.2
Facilities	172.3	-	11.2	-	5.2	188.6
Human Resources	55.4	-	-	-	-	55.4
IT Division & BSC	81.8	-	-	-	-	81.8
Office of the Chief Financial Officer	58.0	-	69.8	7.3	-	135.1
Engineering	5.7	-	-	-	-	5.7
Earth Sciences	0.1	-	-	-	-	0.1
General Lab	-	-	-	-	-	-
TOTAL	563.9	92.6	80.9	7.3	5.2	749.9

Note: Minor variances may occur due to rounding.

(a) Includes Site Support & Strategic Planning Support Activities (SPSA).

(b) LDRD projects conducted by multiple divisions as reflected in Table 1.3.

Figure 3.3

Payroll Burden Summary (\$M)

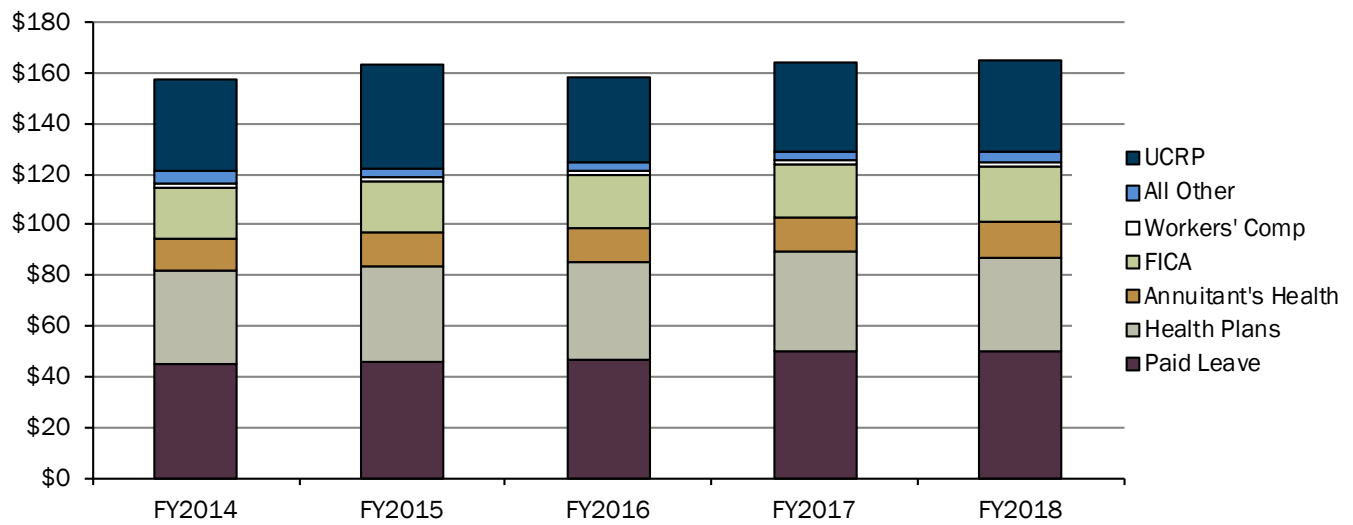
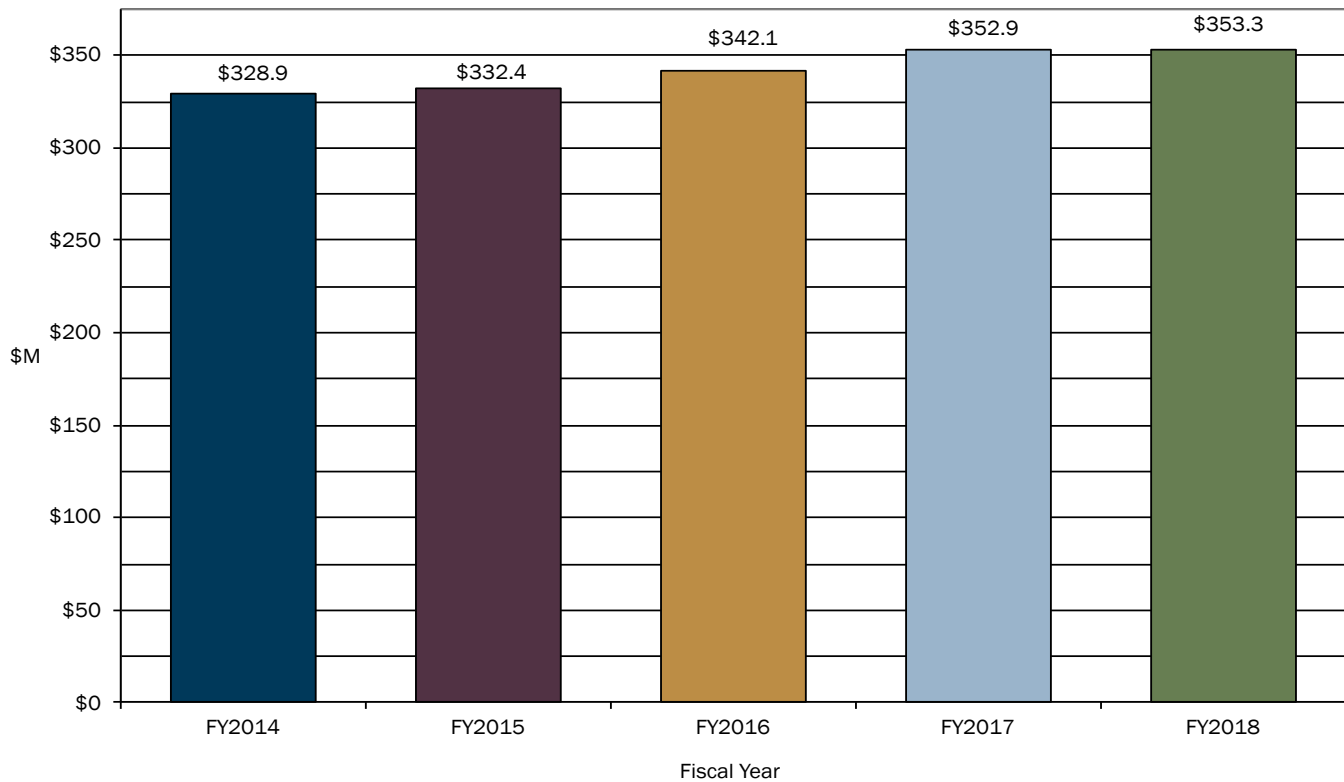


Figure 3.4

Gross Payroll Summary (\$M)



Notes: Gross payroll excludes payroll transactions such as Tuition Reimbursement, Relocation, etc.
 Total annual payroll for FY2016 is \$372M, for FY2017 is \$358M, for FY2018 is \$358M.

Area and Organizational Burden Costs and FTEs

Burden includes costs for the management and supervision of Area/Division activities and is distributed over labor costs including campus and contract labor.

Area/Division Cost Pools	FY2018	
	Cost \$K	Avg FTE
Biosciences	11,685	66.9
Computing Sciences	6,971	36.2
Computational Research	2,461	11.0
Computing Sciences Area	3,351	15.9
National Energy Research Scientific Computing Center	860	6.9
Scientific Networking Division	298	2.4
Earth & Environmental Sciences	4,610	20.9
Energy Sciences	8,659	44.1
Advanced Light Source	2,366	10.8
Chemical Sciences	1,871	11.3
Energy Sciences Area	670	2.8
Materials Sciences	2,287	10.9
Molecular Foundry	1,465	8.4
Energy Technologies Area	7,583	36.4
Physical Sciences	10,871	52.4
Accelerator Technology & Applied Physics	1,640	8.9
Engineering	5,043	22.6
Nuclear Sciences	1,702	9.3
Physical Sciences Area	565	1.7
Physics	1,922	9.9
Directorate & Operations	8,135	33.5
Facilities	5,152	22.1
Information Technology	2,984	11.4
Total	58,513	290.4
Note: Minor Variances may occur due to rounding.		

Service Center Costs and FTEs by Area/Division

Certain Laboratory services are provided by recharges that recover operational costs through various cost-allocation mechanisms; e.g., by assigning a dollar value to the work performed (a unit charge based on an hourly rate) or the products produced (unit charge per item).

Area/Division (a)	FY 2018	
	Cost \$K	Avg FTE
Accelerator Technology & Applied Physics	33	0.1
Biosciences ALD	604	3.6
Biological Systems & Energy	6,516	5.6
Computing Sciences ALD	3,792	-
Earth & Environmental Science ALD	67	0.1
ETA Area Office	2,991	19.0
Engineering	1,564	6.9
Facilities	9,777	2.2
Human Resources (b)	4,029	-
Information Technology	7,812	24.1
Joint Genome Institute	4,724	1.0
Laboratory Directorate	1,283	3.0
Materials Sciences	105	0.6
Molecular Biophysics & Integrated Bioimaging	1,329	5.8
Nuclear Science	216	0.9
Office of the Chief Financial Officer	226	0.3
Total	45,067	73.2
Note: Minor Variances may occur due to rounding. (a) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only and GSRA pass through costs. (b) Includes: GSRA pass through costs.		

Distributed Recharges by Resource Category Trends, FY2014-FY2018 (\$K)

Distributed Recharge (a, b)	FY2014	FY2015	FY2016	FY2017	FY2018
MSD Facility	250	272	272	259	141
Animal Care	640	659	657	605	532
Creative Services	1,233	919	955	1,040	926
FAM Facility Recharge	104	78	57	41	32
ESD Sample Analysis Recharge	49	69	111	82	68
Warehouse Storage Recharge	100	96	90	98	217
88-Inch Accelerator Operations	511	1,026	1,185	1,065	862
JBEI Non-Material Recharge	931	1,335	869	775	640
JBEI Material Recharge	5,162	5,270	5,280	5,477	5,518
BCSB	1,325	1,568	1,445	1,258	1,300
Telephone Services	5,406	5,200	5,592	5,108	5,475
ETA Recharge	2,524	2,802	2,687	2,787	2,808
Computer/Net Recharges	1,683	1,584	1,463	1,473	1,448
Flexlab Recharge	40	60	204	303	210
Engineering Shop	729	656	606	622	745
CAD	728	731	739	669	901
ALS Proprietary Recharge	576	809	868	774	947
JGI Production Sequencing	61	63	38	84	56
NERSC Sponsored Storage Recharge	294	294	569	220	372
Scientific Networking	-	2,683	3,250	3,492	3,338
CRT HPC Recharge	-	1,327	3,612	3,387	3,792
JGI Occupancy Labor Recharge	1,188	980	132	151	150
JGI Occupancy Material Recharge	3,821	4,617	4,231	4,275	3,716
Electricity	12,075	12,919	9,427	8,820	9,816
Sustainability Recharge	-	-	580	921	1,304
GSRA - Material Recharge	3,231	2,917	3,397	3,491	3,959
GSRA - Non-Material Recharge	19	-	-	-	-
Applied Nuclear Physics Recharge	-	-	-	-	215
Total Recharges	43,538	49,798	49,192	48,161	50,423
Note: Minor variances may occur due to rounding. (a) Includes recharges credited back to direct operating accounts such as ALS, ESnet, JGI, etc. (b) Does not include Procurement and Travel recharges.					

FINANCIAL STATEMENT

4

Balance Sheet Comparative Statement of Financial Position (\$K)

	FY2018	FY2017
ASSETS:		
Current Assets		
Cash	4,680	5,376
Accounts Receivable	33,228	36,249
Inventories	440	486
Other Current Assets	1,536	1,176
Total Current Assets	39,884	43,287
Net Plant & Equipment	707,871	666,796
TOTAL ASSETS	747,755	710,083
LIABILITIES AND EQUITY:		
Liabilities:		
Current Liabilities		
Drafts Payable	2,353	3,923
Accounts Payable	19,489	12,383
Inter/Intra DOE Payable	710	1,115
Accrued Expenses	104,102	72,126
Capital Lease Liability - Current	8,266	19,257
Unearned Revenues	60,373	64,205
Other	232	301
Total Current Liabilities	195,525	173,310
Environmental Liabilities	993,508	814,678
Capital Lease Liability - Noncurrent	-	21,123
Post-Retirement Benefits (Note 2)	630,424	633,061
Pension Plan Liability (Note 2)	1,000,083	1,110,347
TOTAL LIABILITIES	2,819,540	2,752,519
DOE EQUITY:		
Beginning Equity	(2,042,436)	(2,360,674)
Change in Equity (Note 2)	(29,349)	318,238
ENDING EQUITY	(2,071,785)	(2,042,436)
TOTAL LIABILITIES AND EQUITY	747,755	710,083
See accompanying Note 1: Summary of Significant Accounting Policies.		

Note 1: Summary of Significant Accounting Policies

Basis of Presentation

This financial statement has been prepared to report the financial position of the Lawrence Berkeley National Laboratory (the Laboratory). It has been prepared from the books and records of the Laboratory in accordance with the Laboratory's accounting policies.

Reporting Entity

The Laboratory is a national research facility operated by UC for DOE under the terms of Contract DE-AC02-05CH11231 (Contract 31). The Laboratory's reporting entity status is that of an integrated contractor, meaning its accounts are integrated with those of DOE through the use of reciprocal accounts.

Basis of Accounting

The financial records of the Laboratory conform to generally accepted accounting principles (GAAP) and cost accounting standards (CAS) when they do not conflict with the provisions of the DOE accounting directives for Management and Operating (M&O) Contractors and are in compliance with Contract 31 between UC and DOE.

Financial Sources

The Laboratory receives funding from DOE in accordance with the provisions of Contract 31. The Laboratory receives authorization to incur costs and conduct operations through modifications to the contract.

In addition to DOE-funded work, reimbursable work is performed for other Federal and non-Federal entities. Costs for reimbursable work are recorded and billed to the requesting entity by the Laboratory. Cash collected from these billings is transmitted to the U.S. Department of the Treasury and deposited in the DOE account. Non-federally funded work performed at the Laboratory must be funded in advance.

Letter of Credit

The Laboratory received authority for expenditures according to a checks-paid letter of credit from the U.S. Department of the Treasury; Letter of Credit Contract Number DE-AC02-05CH11231 with Wells Fargo Bank (WFB). The WFB letter of credit was renewed on November 1, 2012 for a five year term and then extended through October 31, 2019.

Cash

The Laboratory considers all balances in demand deposit accounts to be cash. Demand deposit cash accounts include non-DOE sources of funds including strategic partnership projects, royalties, and gifts.

Accounts Receivable

Accounts receivable include reimbursements due from federal sponsors, short term investments held by the University of California Office of the President (UCOP), and other receivables. Other receivables include receivables related to inter-location appointments, intellectual property licensing agreements, and amounts due from non-federal sponsors.

Inventories

The Laboratory identifies three types of inventory: operating materials, precious metals, and nuclear materials. For operating materials, only those materials meeting a materiality threshold will be accounted for as an asset on the financial statements. Operating materials that do not meet the materiality threshold are accounted for using the purchase method, which allows items to be expensed when purchased. Precious metals procurement through the inter-DOE procurement process are accounted for as assets. Nuclear materials are accounted for as an asset.

continued...

Note 1: Summary of Significant Accounting Policies Continued

Other Current Assets

Other current assets primarily consist of prepaid expenses. The Laboratory accounts for prepaid expenses as balance sheet assets if the amortization of costs will occur over a period exceeding 12 months and amortization is deemed material.

Net Plant and Equipment

Plant and equipment are purchased, constructed, or fabricated in-house and include major modifications or improvements. The Laboratory's capitalization threshold is \$500K for items with an anticipated service life of two years or more. Plant and equipment items meeting these criteria are capitalized. Costs of construction and fabrication are capitalizable expenses and are recorded initially as construction/fabrication work in process. Upon completion, the value is transferred to the appropriate fixed-assets account. Depreciation is computed using the straight-line method over the estimated useful life of the asset.

Liabilities

Liabilities cannot be incurred by Berkeley Lab without an authorized appropriation, except for approved unfunded liabilities.

Current liabilities include accounts payable, inter/intra DOE payables, accrued liabilities, and accrued payroll and vacation. Current liabilities also include the current portion of our capital lease liability as well as unearned revenue related to advances received for reimbursable work and funds held for others.

Long term liabilities include the long-term portion of capital lease liabilities and environmental liabilities. Environmental liabilities include future clean up, restoration activities, and Environment, Health & Safety (ES&H) liabilities to bring facilities and operations into compliance with existing laws. These liabilities are not funded by current appropriations, but are booked as adjusting entries at the direction of DOE.

Pension Plan and Post Retirement Benefit liabilities are determined through coordination between UC and DOE. Both current employees and retirees at the Laboratory participate in the University of California Retirement Plan (UCRP).

Note 2: FY2018 Year-End Adjustments

DOE made adjustments to record FY2018 Post-Retirement Benefit and Pension Plan obligation. These amounts will be reflected in the Laboratory's actuals for October 2018. These adjustments are the result of coordination and approval by both DOE and UC.

The following is the adjusted balance sheet for FY2018:

	Adjusted Balance Sheet (\$K)		
	FY2018	YE Adjustments	Adjusted FY2018
ASSETS:			
Current Assets			
Cash	4,680	-	4,680
Accounts Receivable	33,228	-	33,228
Inventories	440	-	440
Other Current Assets	1,536	-	1,536
Total Current Assets	39,884	-	39,884
Net Plant & Equipment	707,871	-	707,871
TOTAL ASSETS	747,755	-	747,755
LIABILITIES AND EQUITY:			
Liabilities:			
Current Liabilities			
Drafts Payable	2,353	-	2,353
Accounts Payable	19,489	-	19,489
Inter/Intra DOE Payable	710	-	710
Accrued Expenses	104,102	-	104,102
Capital Lease Liability - Current	8,266	-	8,266
Unearned Revenues	60,373	-	60,373
Other	232	-	232
Total Current Liabilities	195,525	-	195,525
Environmental Liabilities	993,508	-	993,508
Capital Lease Liability - Noncurrent	-	-	-
Post-Retirement Benefits	633,061	(2,637)	630,424
Pension Plan Liability	1,110,346	(110,263)	1,000,083
TOTAL LIABILITIES	2,932,440	(112,900)	2,819,540
DOE EQUITY:			
Beginning Equity	(2,042,436)	-	(2,042,436)
Change in Equity	(142,249)	112,900	(29,349)
ENDING EQUITY	(2,184,685)	112,900	(2,071,785)
TOTAL LIABILITIES AND EQUITY	747,755	-	747,755

Note 2 Continued: FY2017 Year-End Adjustments

DOE made adjustments to record FY2017 Post-Retirement Benefit and Pension Plan obligation. These amounts will be reflected in the Laboratory's actuals for October 2017. These adjustments are the result of coordination and approval by both DOE and UC.

The following is the adjusted balance sheet for FY2017:

	Adjusted Balance Sheet (\$K)		
	FY2017	YE Adjustments	Adjusted FY2017
ASSETS:			
Current Assets			
Cash	5,376	-	5,376
Accounts Receivable	36,249	-	36,249
Inventories	486	-	486
Other Current Assets	1,176	-	1,176
Total Current Assets	43,287	-	43,287
Net Plant & Equipment	666,796	-	666,796
TOTAL ASSETS	710,083	-	710,083
LIABILITIES AND EQUITY:			
Liabilities:			
Current Liabilities			
Drafts Payable	3,923	-	3,923
Accounts Payable	12,383	-	12,383
Inter/Intra DOE Payable	1,115	-	1,115
Accrued Expenses	72,126	-	72,126
Capital Lease Liability - Current	19,257	-	19,257
Unearned Revenues	64,205	-	64,205
Other	301	-	301
Total Current Liabilities	173,310	-	173,310
Environmental Liabilities	814,678	-	814,678
Capital Lease Liability - Noncurrent	21,123	-	21,123
Post-Retirement Benefits	686,063	(53,002)	633,061
Pension Plan Liability	1,404,838	(294,491)	1,110,347
TOTAL LIABILITIES	3,100,012	(347,493)	2,752,519
DOE EQUITY:			
Beginning Equity	(2,360,674)	-	(2,360,674)
Change in Equity	(29,255)	347,493	318,238
ENDING EQUITY	(2,389,929)	347,493	(2,042,436)
TOTAL LIABILITIES AND EQUITY	710,083	-	710,083

PROCUREMENT & PROPERTY MANAGEMENT

5

Table 5.1

Purchases Placed Using Purchase Orders/Subcontracts

Total POs	(\$K)	# Actions
\$0 - \$25,000	\$57,807	60,518
\$25,001 - \$150,000	\$81,316	1,334
\$150,001- \$1,000,000	\$100,229	346
\$1,000,001 +	\$189,491	47
Total	\$428,843	62,245

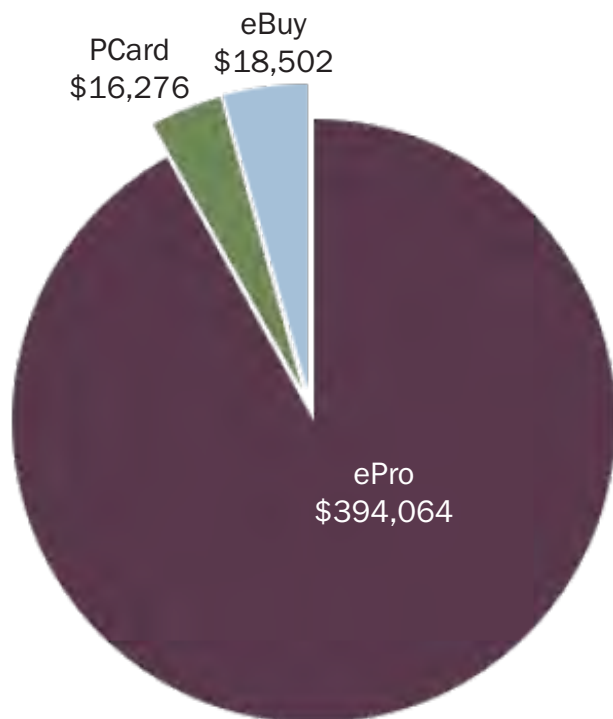
Table 5.2

Procurement Purchase Order Dollar Amount by Area

Area	PO (\$K)
Directorate & Operations	\$179,113
Computing Sciences	\$80,725
Biosciences	\$55,478
Physical Sciences	\$45,580
Energy Technologies	\$30,954
Energy Sciences	\$22,721
Earth & Environmental Sciences	\$14,273
Total	\$428,843

Figure 5.1

Procurement Obligations by Channel (\$K)



PCard - Procurement card managed by the Lab
 eBuy - Berkeley Lab online ecommerce marketplace
 ePro - Purchase Orders

Figure 5.2

Laboratory Supplier Socioeconomic Performance

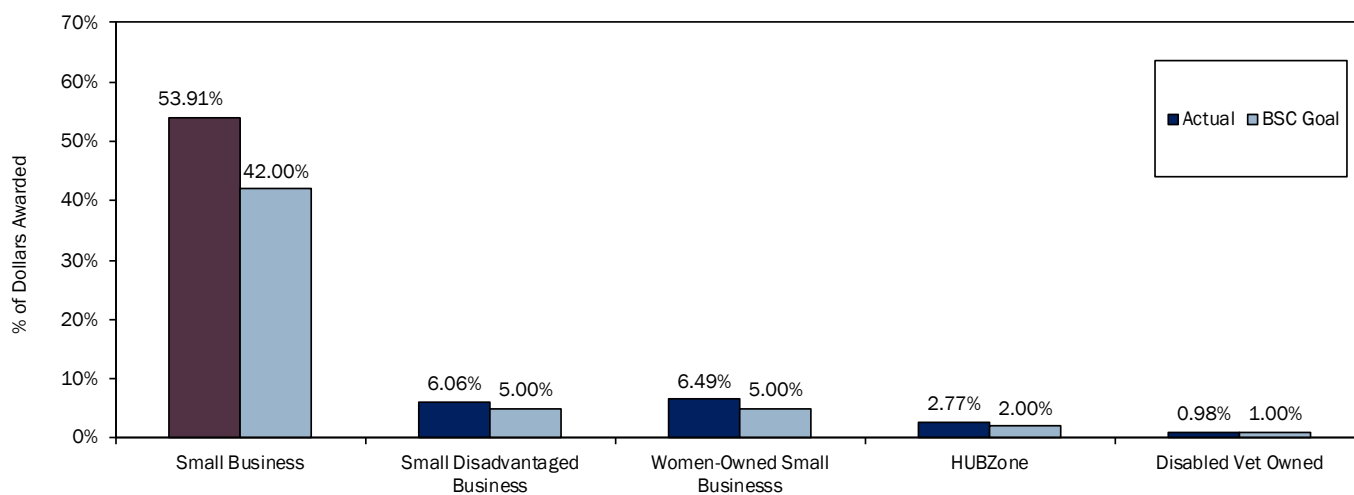


Figure 5.3

Cycle Time for Purchase Orders ≤\$25K — Subcontracting Groups FY2018

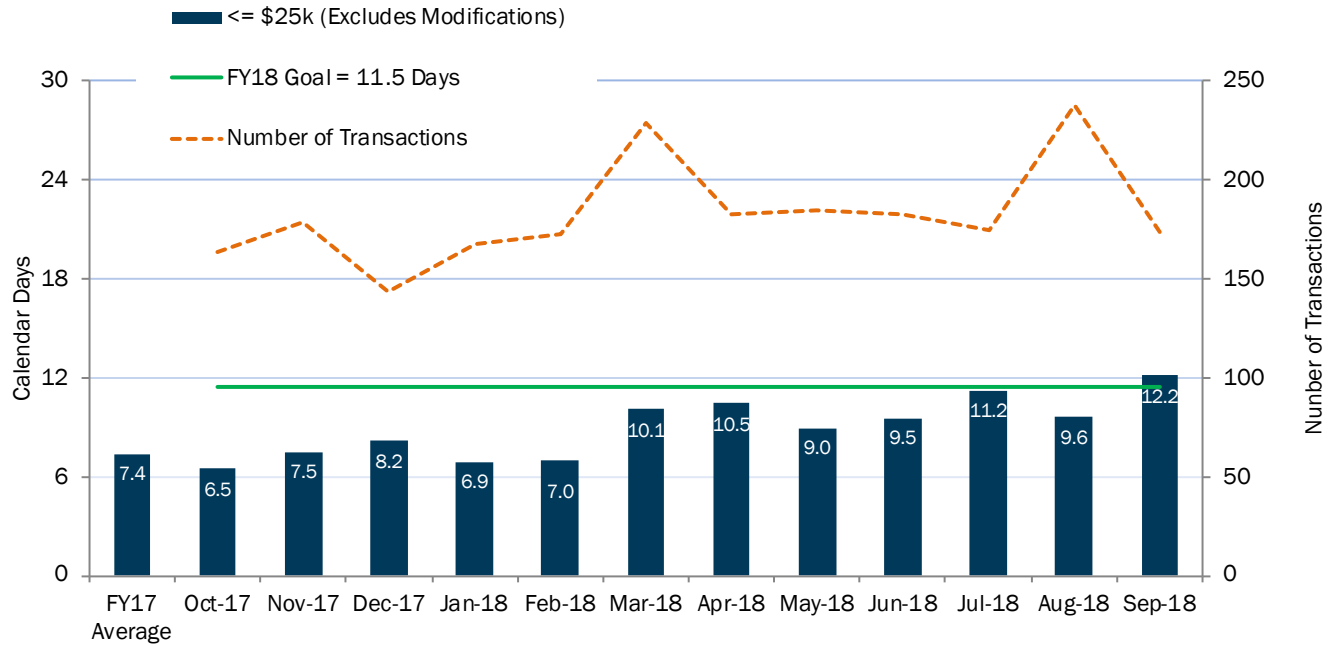


Figure 5.4

Procurement Cost Savings

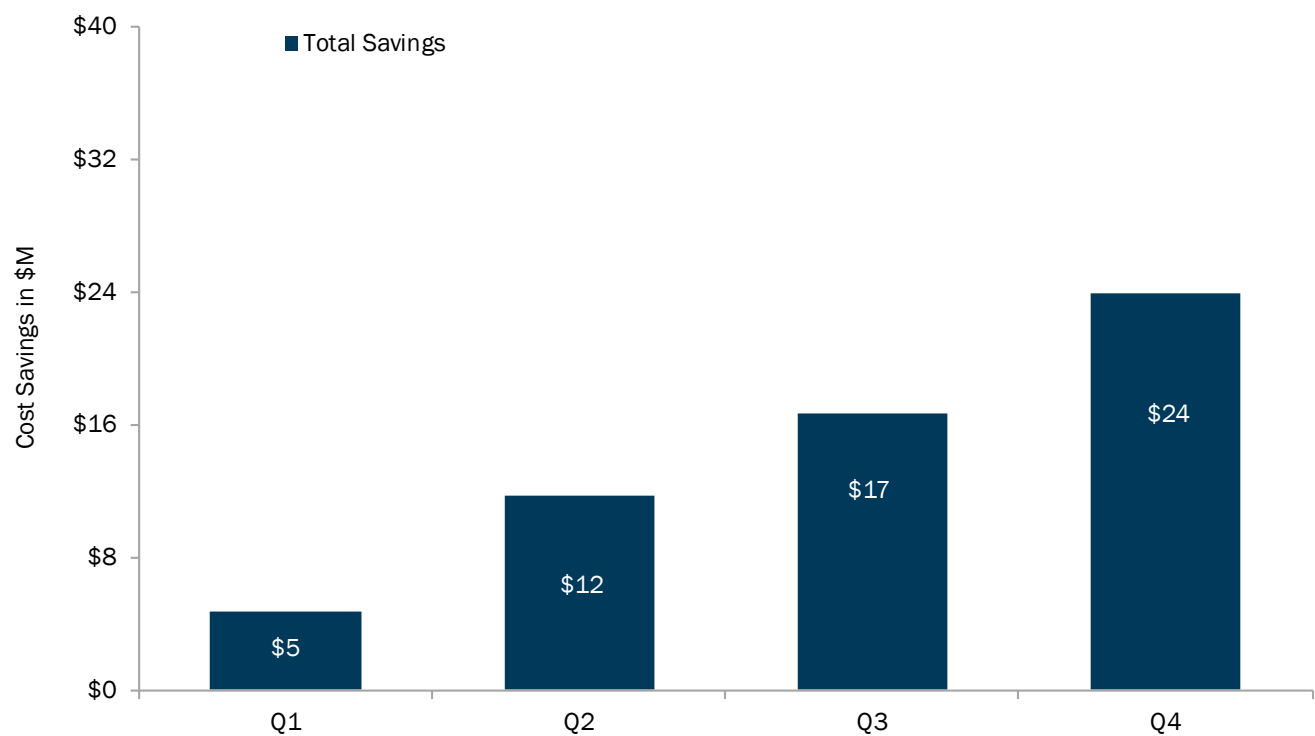


Table 5.3

Property Management Activity

	# of Assets	Acquisition Value (\$K)	
Equipment (a)	6,912	769,620	
Attractive (b)	17,933	61,159	
High Risk (c)	26	209,193	
TOTAL ASSETS	24,871	1,039,972	
Computers Laptops	6,691	12,609	
Computer Desktops	6,415	13,287	
Tablets	1,252	827	
Total	14,358	26,723	
Inventory campaign	Base	Positive Resolutions	% Positive
Attractive	18,255	18,057	98.92%
Controlled	7,094	7,000	98.67%
High Risk	22	22	100%
Final Results	25,371	25,079	98.85%
Validation Size	0	0	0
Assets Scanned	22,939	25,079	91.47%
Division	Asset Count	Acquisition Value (\$K)	
BIOSCIENCES			
Biological Systems & Energy	1,350	25,463	
Biosciences Area Office	946	28,091	
Environmental Genomics & System Biology	349	4,457	
Joint Genome Institute	947	19,776	
Molecular Biophysics & Integrated Bioimaging	669	17,658	
(a) Equipment - Has an acquisition cost > \$10,000; Has an expected useful life of > 2 years. (b) Attractive - Attractive regardless of cost (laptops, desktops, workstations, tablets and radios). (c) High Risk - property used in the nuclear fuel cycle, firearms, ammunition and explosives, nuclear weapon components or nuclear weapon-like components that do not contain nuclear material as listed in DOE O 474.2.			

continued...

Property Management Activity Continued

Division	Asset Count	Acquisition Value (\$K)	
COMPUTING SCIENCES			
Computational Research	945	2,970	
Computing Sciences Area Office	85	153	
National Energy Research Scientific Computing Center	1,251	143,403	
Scientific Networking	666	20,906	
DIRECTORATE & OPERATIONS			
Environment, Health, Safety & Security	320	2,343	
Excess	126	5,907	
Facilities	733	4,768	
Human Resources	167	191	
Information Technology	2,425	21,119	
Laboratory Directorate	156	244	
Office of the Chief Financial Officer	239	396	
Operations	26	37	
Protective Services	578	2,953	
EARTH & ENVIRONMENTAL SCIENCES			
Climate & Ecosystems	634	9,086	
Earth & Environmental Sciences Area Office	316	1,326	
Energy Geosciences	727	11,444	
ENERGY SCIENCES			
Advanced Light Source	1,683	230,443	
Chemical Sciences	1,255	38,430	
Energy Sciences Area Office	19	127	
Material Sciences	1,487	56,243	
Molecular Foundry	1,174	80,591	
ENERGY TECHNOLOGIES			
Bldg Tech Urban Systems	517	5,240	
Cyclotron Road	46	342	
Energy Analysis Environmental Impact	588	7,428	
Energy Storage & Distributed Resources	801	14,831	
Energy Technologies Area Office	121	192	
PHYSICAL SCIENCES			
Accelerator Technology & Applied Physics	998	91,189	
Engineering	918	17,101	
Nuclear Science	763	70,981	
Physics	846	104,143	
TOTAL	24,871	1,039,972	

ACRONYMS & KEY TERMS

6

Acronyms and Key Terms

ALD	Associate Lab Director
ALS	Advanced Light Source
ANL	Argonne National Laboratory
ARPA-E	Advanced Research Projects Agency-Energy
ASCR	Advanced Scientific Computing Research
A/S	Assistant Secretary (DOE)
B&R	Budget and Reporting
BA	Budget Authority
BES	Basic Energy Sciences
BSC	Balanced Score Card
CAD	Computer Aided Design
CAS	Cost Accounting Standards
CFO	Chief Financial Officer
CR	Computational Research
CRADA	Cooperative Research and Development Agreement
CSR	Contractor-funded Institutionally Supported Research and Development
DARHT	Dual Axis Radiographic Hydrodynamic Test
DNA	Deoxyribonucleic Acid
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of Interior
eBuy	Berkeley Lab's Online Marketplace
EERE	Energy Efficiency and Renewable Energy
ERWM	Environmental Restoration and Waste Management
EHS	Environment/Health/Safety
ePro	Berkeley Lab Purchase Orders
ESnet	Energy Sciences Network
FTE	Full-Time Equivalent
FY	Fiscal Year (October 1 through September 30)
G&A	General and Administrative
GAAP	Generally Accepted Accounting Principles
G/L	General Ledger
GSO	Goods and Services on Order
GSRA	Graduate Student Research Assistant

Acronyms and Key Terms Continued

HR	Human Resources
HWC	Hazardous Waste Charge
HZE	High-Z High-Energy
I-MANAGE	Integrated Management Navigation System
IC	Integrated Contractor
ICO	Integrated Contractor Order
IGPP	Institutional General Plant Project
IJE	Inter-Jurisdictional Employee Exchange
ILA	Inter-Location Appointment
IPA	Inter-Governmental Personnel Assignment
IT	Information Technology
JCAP	Joint Center for Artificial Photosynthesis
JGI	Joint Genome Institute
LANL	Los Alamos National Laboratory
LBF	Low Background Facilities
LBNL	Lawrence Berkeley National Laboratory
LDRD	Laboratory Directed Research and Development
LLNL	Lawrence Livermore National Laboratory
M&O	Management & Operating
MLA	Multiple Location Appointment
NASA	National Aeronautics and Space Administration
NERSC	National Energy Research Scientific Computing Center
NIH	National Institutes of Health
NNSA	National Nuclear Security Administration
NPO	Nonprofit Organization
NSF	National Science Foundation
O&M	Operations & Maintenance
OASDI	Old Age, Survivors and Disability Insurance
OCFO	Office of the Chief Financial Officer
OHRCH	Overhead Recharge
ORNL	Oak Ridge National Laboratory
PCard	Procurement Card
PLF	Paid Leave Factor
PNNL	Pacific Northwest National Laboratory
PPPL	Princeton Plasma Physics Laboratory

Acronyms and Key Terms Continued

R&D	Research and Development
S&S	Safeguard & Security
SB	Small Business
SDB	Small Disadvantaged Business
SLAC	Stanford Linear Accelerator Center
SN	Scientific Networking
SNAP	SuperNova Acceleration Project
SNL	Sandia National Laboratories
SPSA	Strategic Planning Support Activities
STARS	Standard Accounting and Reporting System
UC	University of California
UCRP	University of California Retirement Plan
WOSB	Women-Owned Small Business

Key Terms

Throughout this document, \$K means dollars in thousands, \$M means dollars in millions, and \$B means dollars in billions.

Disclaimer

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