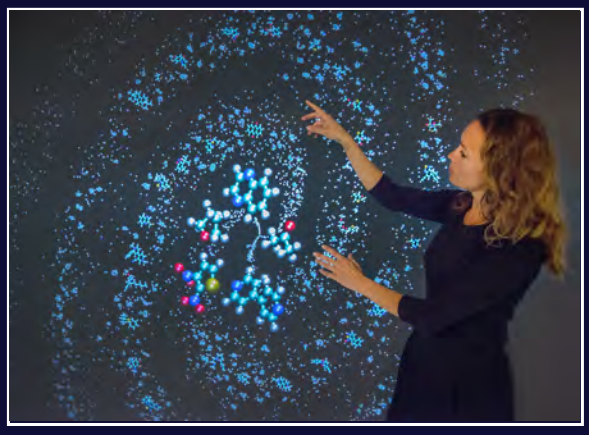

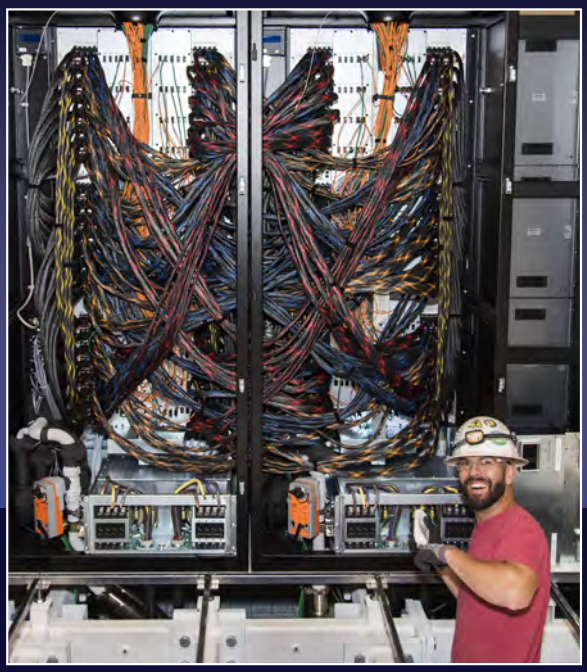

Lawrence Berkeley National Laboratory

2016

Annual Financial Report

BERKELEY LAB

OCFO

Office of the Chief Financial Officer

Lawrence Berkeley National Laboratory

2016 Annual Financial Report

Ernest Orlando Lawrence Berkeley National Laboratory
University of California
Berkeley, California

February 2017

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Front Cover: (top) Kristin Persson with 3D visualization, (second from top) CORI Phase II Installation, (third from top) Deepak Dugar, Berkeley Lab Cyclotron Road PI in lab at JBEI, (bottom) Berkeley Lab employees taking part in the Great California Shakeout Drill at Lawrence Berkeley National Laboratory.

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Lawrence Berkeley National Laboratory is an internationally renowned institution dedicated to addressing the world's most urgent scientific challenges, from advancing sustainable energy and protecting human health to revealing the origins and fate of the universe. As the original home of "team science," which emphasizes interdisciplinary research in the public interest, Berkeley Lab's scientific expertise has been recognized with 13 Nobel Prizes. The University of California has managed the Lab on behalf of the U.S. Department of Energy (DOE) since its founding in 1931.

FY2016 was a year of significant change and progress at Berkeley Lab. In March, Laboratory Director Michael Witherell assumed his new role when former Lab Director Paul Alivisatos became Vice Chancellor for Research at UC Berkeley. Dr. Witherell has solidified the Lab's strategy, with a focus on long term science and technology priorities. Large-scale science efforts continued to expand at the Lab, including the Dark Energy Spectroscopic Instrument now heading towards construction, and the LUX-ZEPLIN dark matter detector to be built underground in South Dakota. Another proposed project, the Advanced Light Source-Upgrade, was given preliminary approval and will be the Lab's largest scientific investment in years. Construction of the Integrative Genomics Building began, and will bring together researchers from the Lab's Joint Genome Institute, now based in Walnut Creek, and the Systems Biology Knowledgebase (K-Base) under one roof. Investment in the Lab's infrastructure also continues, informed by the Lab's Infrastructure Strategic Plan. Another important focus is on developing the next generation of scientists with the talent and diversity needed to sustain Berkeley Lab's scientific leadership and mission contributions to DOE and the Nation.

Berkeley Lab received $897.5M in new FY2016 funding, a 12.5% increase over FY2015, for both programmatic and infrastructure activities. While the Laboratory experienced a substantial increase in funding, it was accompanied by only a modest increase in spending, as areas of growth were partially offset by the completion of several major efforts in FY2015. FY2016 costs were $826.9M, an increase of 1.9% over FY2015. Similar to the prior year, the indirect-funded Operations units worked with generally flat budgets to yield more funding for strategic needs. A key challenge for Berkeley Lab continues to be achieving the best balance to fund essential investments, deliver highly effective operational mission support and remain cost-competitive. Through a comprehensive approach to prioritize competing needs, the Lab ended the year in a favorable financial position.

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

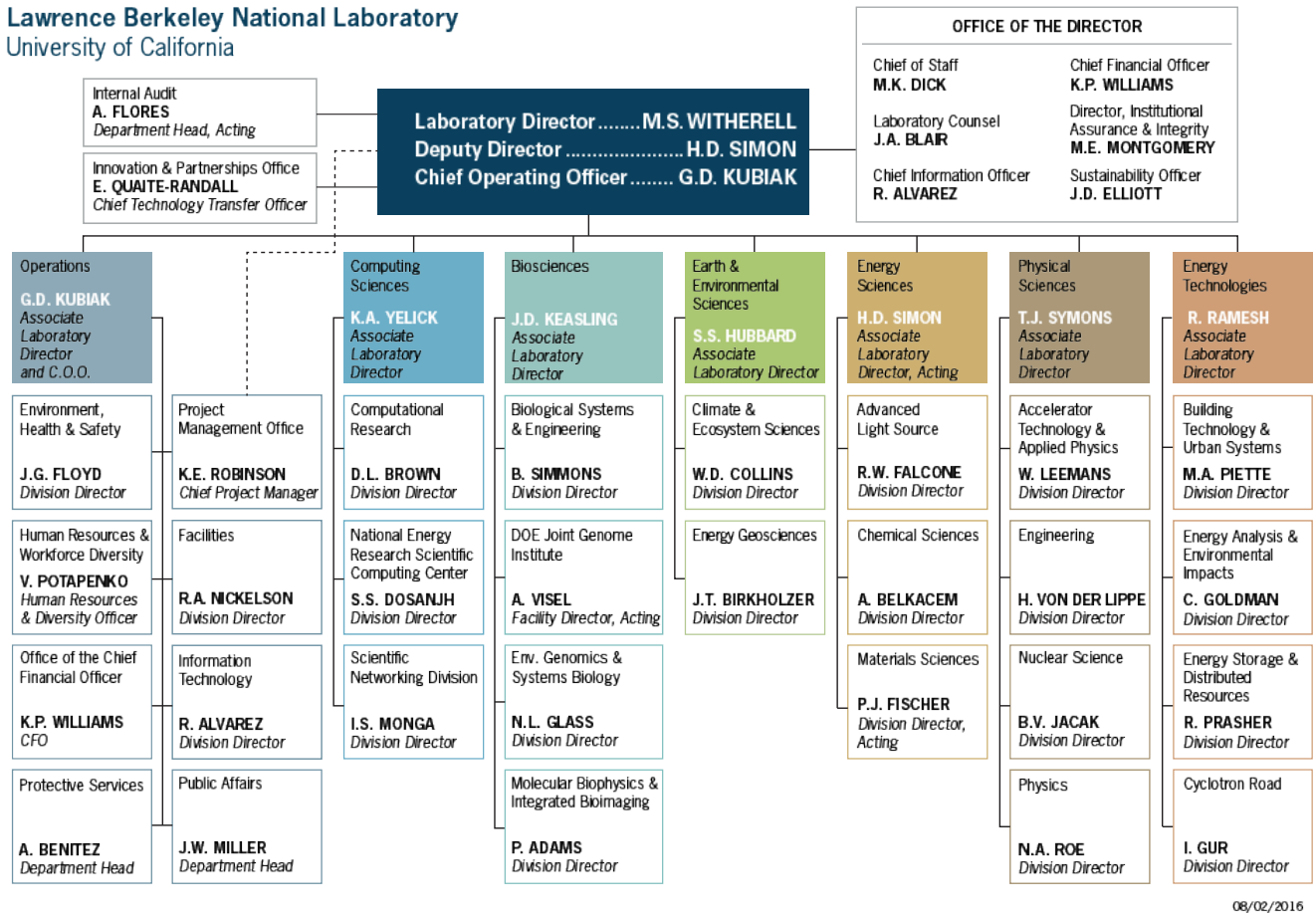
The Office of the Chief Financial Officer (OCFO) played a key role in providing analysis and decision support to Executive Leadership, enabling the Lab to enhance its financial management strategies. In FY2016, the OCFO updated its analytic approaches and models to enhance long term financial projections under various funding and investment scenarios, and to assess total cost of ownership for major proposed investments. These improvements provided the new Lab Director and Senior Leadership with more comprehensive information and analytic support for planning and prioritization efforts.

Within the OCFO, we focused on core operations and key initiatives defined in our OCFO Strategic Roadmap. The Lab's Financial System transitioned from stabilization to optimization, with a focus on expanding the financial reporting capabilities considerably. We completed implementation of the eCommerce platform, achieving a notable outcome for the Lab in close partnership with DOE's Office of Science. In other accomplishments, we launched a financial literacy program to enable Lab managers and staff to understand and execute their financial management and stewardship responsibilities more effectively; made substantial progress in enhancing our Field Finance model that provides financial support to client divisions and areas; developed a business process governance model to define OCFO business processes, clarify roles, and strengthen service delivery; and implemented a Partners in Leadership training program to build leadership capacity among our staff. We completed a 'refresh' of our Strategic Roadmap, which now defines our priorities for FY2017-FY2019. As a part of this effort, we made a subtle but important change to the OCFO mission statement to call out the Lab's research and stewardship mission to sustain the Lab's science and technology capabilities now and into the future.

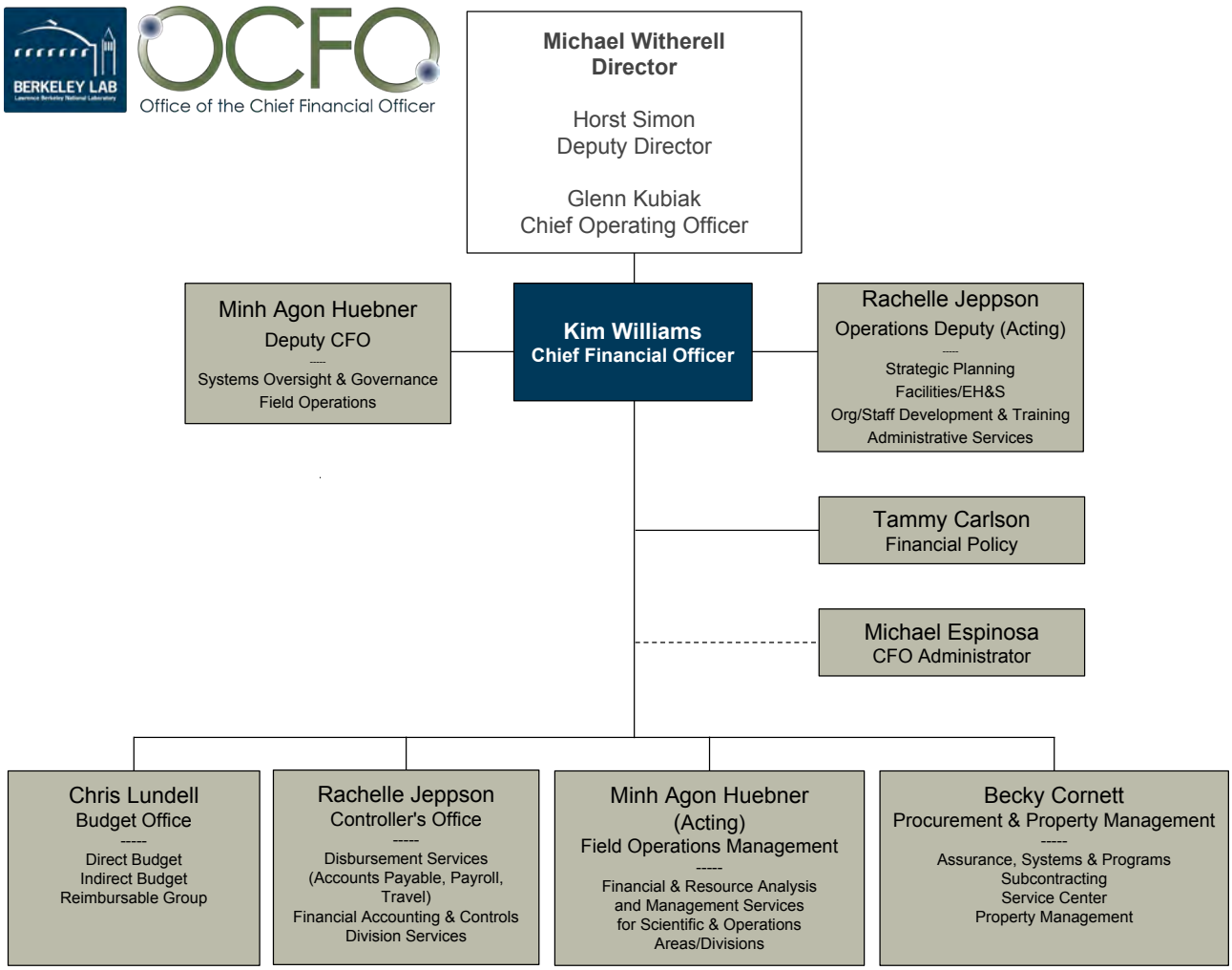
Berkeley Lab's FY2016 progress on all fronts - scientific, operations, and financial management – position the Lab to continue bringing science solutions to the world as we charge into the 21st Century.

Kim Williams
Chief Financial Officer

Lawrence Berkeley National Laboratory (LBNL), University of California Organization



Office of the Chief Financial Officer Organization



1. INSTITUTIONAL INFORMATION

Figure 1.1

Where Did Your Program Dollars Go in FY2016?

Expenses	DOE Operating Costs	DOE Integrated Contractors Costs	Construction and Equipment	SPP Non-DOE
DIRECT				
Direct Labor				
UC Labor (a)	$0.34	$0.34	$0.17	$0.36
Contract Labor	$0.00	$0.01	$0.00	$0.00
Organization/ALD Burden	$0.06	$0.06	$0.03	$0.07
Subtotal Direct Labor	$0.40	$0.40	$0.20	$0.42
Other Direct				
Services	$0.19	$0.18	$0.40	$0.13
Materials	$0.09	$0.05	$0.27	$0.05
Utilities	$0.01	$0.00	$0.00	$0.01
Other Expenses (c)	$0.01	$0.00	$0.00	$0.01
Recharges (b,d)	$0.02	$0.11	$0.01	$0.05
Travel	$0.02	$0.01	$0.01	$0.02
Subtotal Other Direct	$0.33	$0.36	$0.68	$0.26
Total Direct	**$0.73**	**$0.77**	**$0.89**	**$0.68**
INDIRECT				
Procurement	$0.01	$0.02	$0.03	$0.01
Travel	$0.00	$0.00	$0.00	$0.00
G&A (Other Inst.)	$0.25	$0.21	$0.09	$0.30
Total Indirect	**$0.27**	**$0.23**	**$0.11**	**$0.32**
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/GSRA's and Campus Labor.
(b) Distributed activities used by direct funded programs. ALD Burden implemented at beginning of FY2013.
(c) Includes misc. expenses (stipends, sales tax, freight, etc.).
(d) Includes recharges credited back to direct operating accounts such as ALS and ESnet.

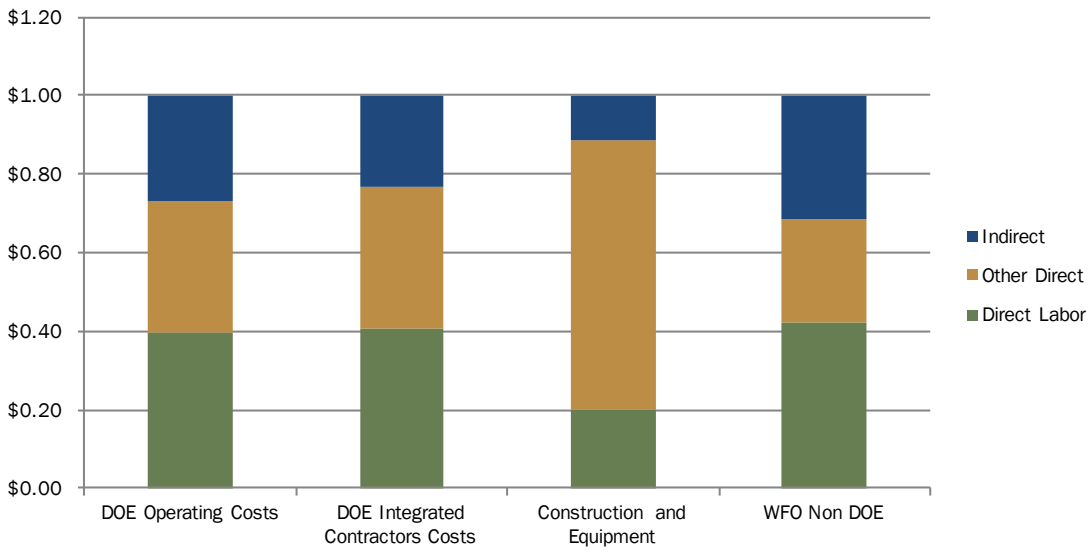


Table 1.1

Cost Trends by Expense Category, FY2012-FY2016 ($M and % of Total)

	FY2012		FY2013		FY2014		FY2015		FY2016	
Expenses	$M	%	$M	%	$M	%	$M	%	$M	%
DIRECT										
Direct Labor										
UC Labor (a)	271.5	33.1%	273.2	33.4%	274.8	35.0%	277.4	34.2%	275.1	33.3%
Contract Labor	0.8	0.1%	0.7	0.1%	0.4	0.0%	0.4	0.0%	1.3	0.2%
Organization/ALD Burden	41.3	5.0%	42.4	5.2%	42.4	5.4%	42.8	5.3%	47.5	5.7%
Subtotal Direct Labor	313.6	38.3%	316.4	38.6%	317.6	40.5%	320.5	39.5%	323.9	39.2%
Other Direct										
Services	182.6	22.3%	183.3	22.4%	150.8	19.2%	150.2	18.5%	158.1	19.1%
Materials	88.9	10.9%	79.0	9.6%	71.1	9.1%	82.6	10.2%	77.9	9.4%
Utilities	8.4	1.0%	7.8	1.0%	9.2	1.2%	9.6	1.2%	6.9	0.8%
Other Expenses (c)	5.7	0.7%	3.4	0.4%	3.6	0.5%	5.7	0.7%	5.6	0.7%
Recharges (b,d)	20.3	2.5%	22.8	2.8%	23.4	3.0%	21.9	2.7%	23.3	2.8%
Travel	13.1	1.6%	12.5	1.5%	12.2	1.6%	11.8	1.5%	12.7	1.5%
Subtotal Other Direct	319.0	38.9%	308.8	37.7%	270.2	34.4%	281.8	34.7%	284.6	34.4%
Total Direct	**632.6**	**77.2%**	**625.2**	**76.3%**	**587.8**	**74.9%**	**602.3**	**74.2%**	**608.5**	**73.6%**
INDIRECT										
Procurement	8.6	1.1%	9.3	1.1%	8.5	1.1%	9.2	1.1%	9.6	1.2%
Travel	1.9	0.2%	1.4	0.2%	1.3	0.2%	0.9	0.1%	1.0	0.1%
G&A (Other Inst.)	176.0	21.5%	183.3	22.4%	187.3	23.9%	198.9	24.5%	207.8	25.1%
Total Indirect	**186.5**	**22.8%**	**194.1**	**23.7%**	**197.1**	**25.1%**	**209.0**	**25.8%**	**218.4**	**26.4%**
TOTAL EXPENSES	**819.1**	**100.0%**	**819.2**	**100.0%**	**784.9**	**100.0%**	**811.3**	**100.0%**	**826.9**	**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) Distributed activities used by direct funded programs. ALD Burden implemented at beginning of FY2013.
(c) Includes misc. expenses (stipends, sales tax, freight, etc.).
(d) Includes recharges credited back to direct operating accounts such as ALS and ESnet.

Table 1.2

Direct Cost Trends by Area and Division, FY2012 - FY2016 ($K)

Area and Division	FY2012	FY2013	FY2014	FY2015	FY2016
Biosciences (a)	**189,375**	**178,265**	**175,688**	**174,901**	**169,850**
Biological Systems & Engineering	-	-	-	-	45,702
Environmental Genomics & System Biology	-	-	-	-	17,744
Genomics	5,951	7,419	7,036	7,963	-
Joint Genome Institute	72,055	67,646	71,014	73,127	68,915
Life Sciences	49,384	41,123	34,852	30,132	-
Molecular Biophysics & Integrated Bioimaging	-	-	-	-	37,489
Physical Biosciences	61,986	62,076	62,787	63,680	-
Computing Sciences (b)	**125,749**	**139,536**	**134,324**	**167,127**	**158,354**
Computational Research	-	-	-	32,171	35,563
Computing Sciences	125,749	139,536	134,324	-	-
National Energy Research Scientific Computing Center	-	-	-	93,768	80,041
Scientific Networking	-	-	-	41,189	42,749
Directorate & Operations	**45,125**	**42,955**	**19,393**	**17,032**	**23,135**
Environment/Health/Safety	3,360	1,518	51	34	31
Facilities	37,843	36,455	11,571	9,323	14,098
Information Technology	2,781	2,081	2,550	2,306	3,128
Laboratory Directorate	1,088	1,394	1,310	173	316
Other	52	64	51	106	123
Public Affairs	-	-	-	1,422	1,520
Protective Services	-	1,442	3,860	3,670	3,919
Earth & Environmental Sciences (c)	**55,399**	**57,319**	**58,125**	**64,683**	**65,537**
Climate & Ecosystems	-	-	-	-	36,519
Earth Sciences	55,399	57,319	58,125	64,683	-
Energy Geosciences	-	-	-	-	29,019

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 Computational Research, National Energy Research and Scientific Computing Center in FY2015.
(c) Earth and Environmental Sciences reorganized in FY2016, forming Climate & Ecosystems and Energy Geosciences.

continued...

Table 1.2 Continued

Direct Cost Trends by Area and Division, FY2012 - FY2016 ($K) Continued

Area and Division	FY2012	FY2013	FY2014	FY2015	FY2016
Energy Sciences	**169,887**	**175,457**	**174,961**	**157,831**	**163,012**
Advanced Light Source	70,357	74,850	69,647	60,233	65,578
Chemical Sciences	17,979	22,298	27,281	24,737	28,478
Material Sciences	81,551	78,309	78,034	72,860	68,955
Energy Technologies (d)	**107,006**	**103,779**	**107,543**	**106,834**	**107,666**
Building Technologies & Urban Systems	-	-	-	-	33,893
Cyclotron Road	-	-	-	-	1,739
Energy Analysis & Environmental Impacts	-	-	-	-	42,576
Energy Storage & Distributed Resources	-	-	-	-	29,458
Energy Technologies	107,006	103,779	107,543	106,834	-
Physical Sciences	**126,552**	**121,930**	**114,883**	**122,867**	**139,346**
Accelerator Technology & Applied Physics	43,585	31,520	28,562	32,470	38,772
Engineering	3,524	4,934	5,151	4,549	2,223
Nuclear Science	38,809	37,193	32,397	33,439	33,681
Physics	40,633	48,283	48,773	52,409	64,669
DIVISION TOTAL	**819,093**	**819,242**	**784,917**	**811,276**	**826,899**

Note: Minor variances may occur due to rounding.
(d) Energy Technologies reorganized in FY2016, forming Building Technologies & Urban Systems, Cyclotron Road, Energy Analysis & Environmental Impacts, and Energy Storage & Distributed Resources.

Table 1.2a

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

Area and Division	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal	Operating Subtotal	Capital and Equipment	Total
Biosciences (a)	**127,768**	**302**	**26,161**	**15,619**	**169,850**	**-**	**169,850**
Biological Systems & Engineering	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/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

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 Computational Research, National Energy Research and Scientific Computing Center in FY2015.
(c) Earth and Environmental Sciences reorganized in FY2016, forming Climate & Ecosystems and Energy Geosciences.

continued...

Table 1.2a Continued

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

Area and Division	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal	Operating Subtotal	Capital and Equipment	Total
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.
(d) Energy Technologies reorganized in FY2016, forming Building Technologies & Urban Systems, Cyclotron Road, Energy Analysis & Environmental Impacts, and Energy Storage & Distributed Resources.

Table 1.2b

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	Operating Subtotal	Capital and Equipment	Total
Biosciences (a)	**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 (b)	**161,713**	**2,867**	**2,225**	**322**	**167,127**	**-**	**167,127**
Computational 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/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 (c)	**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 (d)	**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) 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 Computational Research, National Energy Research and Scientific Computing Center in FY2015.
(c) Earth and 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 Impacts, and Energy Storage & Distributed Resources.

Table 1.2c

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

Area and Division	FY2014						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal	Operating Subtotal	Capital and Equipment	Total
Biosciences (a)	**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 (b)	**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/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 (c)	**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 (d)	**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) 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 Computational Research, National Energy Research and Scientific Computing Center in FY2015.
(c) Earth and 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 Impacts, and Energy Storage & Distributed Resources.

Table 1.2d

Costs by Direct Funding Source by Area and Division, FY2013 ($K)

Area and Division	FY2013						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal	Operating Subtotal	Capital and Equipment	Total
Biosciences (a)	**126,410**	**453**	**37,135**	**13,432**	**177,431**	**834**	**178,265**
Genomics	1	-	4,894	2,525	7,419	-	7,419
Genomics - JGI	67,048	-	-	598	67,646	-	67,646
Life Sciences	8,081	-	28,444	4,578	41,104	19	41,123
Physical Biosciences	51,280	453	3,797	5,731	61,261	815	62,076
Computing Sciences (b)	**129,882**	**841**	**1,825**	**1,387**	**133,935**	**5,601**	**139,536**
Computing Sciences	129,882	841	1,825	1,387	133,935	5,601	139,536
Directorate & Operations	**7,136**	**114**	**-**	**150**	**7,399**	**35,556**	**42,955**
Environment/Health/Safety	1,480	-	-	-	1,480	39	1,518
Facilities	938	-	-	-	938	35,517	36,455
Information Technology	1,931	-	-	150	2,081	-	2,081
Protective Services	1,442	-	-	-	1,442	-	1,442
Lab Directorate	1,345	49	-	-	1,394	-	1,394
Other	-	64	-	-	64	-	64
Earth & Environmental Sciences (c)	**42,882**	**3,353**	**1,869**	**9,214**	**57,319**	**-**	**57,319**
Earth Sciences	42,882	3,353	1,869	9,214	57,319	-	57,319
Energy Sciences	**144,738**	**699**	**3,631**	**11,788**	**160,856**	**14,601**	**175,457**
Advanced Light Source	61,368	91	-	963	62,422	12,428	74,850
Chemical Sciences	18,867	94	1,438	1,898	22,298	-	22,298
Materials Sciences	64,502	514	2,193	8,927	76,136	2,173	78,309
Energy Technologies (d)	**74,587**	**2,365**	**9,142**	**17,571**	**103,666**	**114**	**103,779**
Environmental Energy Technologies	74,587	2,365	9,142	17,571	103,666	114	103,779
Physical Sciences	**87,334**	**9,712**	**8,935**	**3,772**	**109,753**	**12,177**	**121,930**
Accelerator & Fusion Research	19,768	1,869	731	541	22,909	8,611	31,520
Engineering	128	2,232	950	1,073	4,382	552	4,934
Nuclear Science	20,283	5,311	6,650	2,009	34,253	2,940	37,193
Physics	47,155	300	604	149	48,209	74	48,283
DIVISION TOTAL	**612,968**	**17,537**	**62,538**	**57,315**	**750,359**	**68,882**	**819,242**

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 Computational Research, National Energy Research and Scientific Computing Center in FY2015.
(c) Earth and 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 Impacts, and Energy Storage & Distributed Resources.

Table 1.2e

Costs by Direct Funding Source by Area and Division, FY2012 ($K)

Area and Division	FY2012						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal	Operating Subtotal	Capital and Equipment	Total
Biosciences (a)	**131,301**	**259**	**41,526**	**13,493**	**186,578**	**2,798**	**189,375**
Genomics	11	-	4,621	1,319	5,951	-	5,951
Genomics - JGI	70,069	-	4	676	70,749	1,306	72,055
Life Sciences	10,581	-	33,245	4,943	48,769	616	49,384
Physical Biosciences	50,639	259	3,656	6,555	61,109	876	61,986
Computing Sciences (b)	**119,388**	**2,142**	**2,724**	**1,232**	**125,485**	**264**	**125,749**
Computing Sciences	119,388	2,142	2,724	1,232	125,485	264	125,749
Directorate & Operations	**12,267**	**110**	**-**	**146**	**12,523**	**32,602**	**45,125**
Environment/Health/Safety	2,501	-	-	-	2,501	859	3,360
Facilities	6,101	-	-	-	6,101	31,742	37,843
Information Technology	2,636	-	-	145	2,781	-	2,781
Lab Directorate	1,030	58	-	0	1,088	-	1,088
Other	-	52	-	-	52	-	52
Earth & Environmental Sciences (c)	**39,490**	**2,005**	**2,740**	**11,164**	**55,399**	**-**	**55,399**
Earth Sciences	39,490	2,005	2,740	11,164	55,399	-	55,399
Energy Sciences	**142,881**	**220**	**3,534**	**9,854**	**156,489**	**13,399**	**169,887**
Advanced Light Source	58,387	69	-	1,010	59,466	10,892	70,357
Chemical Sciences	17,302	49	312	315	17,979	-	17,979
Materials Sciences	67,192	102	3,221	8,529	79,044	2,507	81,551
Energy Technologies (d)	**74,951**	**2,841**	**10,011**	**18,512**	**106,315**	**691**	**107,006**
Environmental Energy Technologies	74,951	2,841	10,011	18,512	106,315	691	107,006
Physical Sciences	**89,671**	**5,860**	**8,153**	**2,941**	**106,625**	**19,927**	**126,552**
Accelerator & Fusion Research	24,493	1,115	1,768	490	27,867	15,718	43,585
Engineering	618	1,155	982	770	3,524	-	3,524
Nuclear Science	26,821	2,679	5,185	1,283	35,969	2,840	38,809
Physics	37,739	910	217	398	39,264	1,369	40,633
DIVISION TOTAL	**609,950**	**13,437**	**68,687**	**57,340**	**749,413**	**69,680**	**819,093**

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 Computational Research, National Energy Research and Scientific Computing Center in FY2015.
(c) Earth and 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 Impacts, and Energy Storage & Distributed Resources.

Table 1.3

Indirect Budget Costs by Area and Division, FY2016 ($K)

Division/Area	Area/Org. Burden	Service Centers (b)	Other (c)	LDRD	IGPP	G&A	Procurement Burden	Site Support	Travel Burden	Total (a)
Biosciences	**12,301**	**13,043**		**3,646**						**28,990**
Biological Systems & Engineering		6,386		(1)						6,385
Bioscience Area Office	12,304	735								13,039
Environmental Genomics & System Biology	(3)			1,530						1,527
Joint Genome Institute		4,365		867						5,232
Molecular Biophysics & Integrated Bioimaging		1,556		1,251						2,807
Computing Sciences	**6,748**	**3,612**		**3,966**						**14,327**
Computational Research	2,345			3,303						5,649
Computing Sciences ALD	2,934	3,612								6,547
National Energy Research Scientific Computing Center	986			376						1,362
Scientific Networking	482			286						769
Directorate & Operations	**7,710**	**22,040**			**8,590**	**84,244**	**13,803**	**96,765**	**1,247**	**234,399**
Chief Financial Officer		98				9,043	11,961		1,247	22,350
Environment, Health, and Safety								21,259		21,259
Facilities	4,837	10,055			8,590		1,842	64,695		90,018
Human Resources		3,405				10,024				13,429
Information Technology	2,872	6,946				31,670				41,488
Laboratory Directorate		571				17,710		756		19,036
Operations						4,668				4,668
Other						8,147				8,147
Protective Services								10,056		10,056
Public Affairs		966				2,981				3,947

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).
(d) Includes: UC Management Fee (General Laboratory)

continued...

Table 1.3 Conintued

Indirect Budget Costs by Area and Division, FY2016 ($K) Continued

Division/Area	Area/Org. Burden	Service Centers (b)	Other (c)	LDRD	IGPP	G&A	Procurement Burden	Site Support	Travel Burden	Total (a)
Earth & Environmental Sciences	4,398	112		3,099				10		7,619
Climate & Ecosystems				1,683						1,683
Earth & Environ Science ALD	4,398	112						10		4,520
Energy Geosciences				1,416						1,416
Energy Sciences	**8,756**	**209**		**5,117**						**14,081**
Advanced Light Source	2,374			1,853						4,227
Chemical Sciences	2,199			939						3,138
Energy Sciences ALD	551									551
Material Sciences	3,631	209		2,325						6,165
Energy Technologies	**8,042**	**2,872**		**2,541**						**13,455**
Building Technologies & Urban Systems		1,117		530						1,647
Cyclotron Road										-
Energy Analysis & Environmental Impacts		1,085		419						1,504
Energy Storage & Distributed Resources		670		1,622						2,292
Energy Technologies ALD	8,042			(30)						8,012
Physical Sciences	**10,628**	**1,403**	**248**	**6,178**		**1,017**		**1,653**		**21,127**
Accelerator Technology & Applied Physics	1,662	81		1,535						3,277
Engineering	4,922	1,322		234		1,017		1,653		9,148
Nuclear Science	1,841	0	248	1,882						3,971
Physics	2,203			1,803						4,005
Physical Sciences ALD				725						725
TOTAL	**58,582**	**43,291**	**248**	**24,546**	**8,590**	**85,262**	**13,803**	**98,429**	**1,247**	**333,997**

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).

Table 1.4

Average FTE Breakdown by Area and Division, FY2016

Division/Area	Direct Funded FTEs				Indirect Funded FTEs				Total FTEs
	DOE Direct Operating	Other Direct Operating (a)	Capital & Equipment	Direct Funded Total	Area/ ORG Burden	Service Centers (b)	Operations Overhead (c)	Indirect Funded Total	
Biosciences	**364.9**	**128.7**	**-**	**493.6**	**76.5**	**20.4**	**19.1**	**115.9**	**609.6**
Biological Systems & Engineering	105.1	44.7	-	149.7	1.5	7.7	0.0	9.2	158.9
Bioscience Area Office	0.2	-	-	0.2	71.5	4.7	0.4	76.6	76.8
Environmental Genomics & System Biology	49.8	33.8	-	83.7	1.3	-	6.0	7.3	91.0
Joint Genome Institute	187.6	3.5	-	191.0	0.1	1.1	5.2	6.3	197.3
Mol Biophysics & Integrated Bioimaging	22.3	46.7	-	69.0	2.1	7.0	7.5	16.5	85.6
Computing Sciences	**216.6**	**10.3**	**-**	**226.9**	**36.9**	**-**	**14.6**	**51.5**	**278.4**
Computational Research	86.8	9.2	-	96.0	10.0	-	12.7	22.7	118.7
Computing Sciences ALD	-	-	-	-	15.5	-	-	15.5	15.5
National Energy Research Scientific Computing Center	84.2	0.9	-	85.1	7.5	-	1.2	8.6	93.8
Scientific Networking	45.6	0.2	-	45.8	3.9	-	0.8	4.7	50.5
Earth & Environmental Sciences	**133.5**	**36.5**	**1.1**	**171.2**	**22.2**	**0.3**	**12.4**	**34.9**	**206.1**
Climate & Ecosystems	78.7	20.0	1.1	99.8	-	-	7.0	7.0	106.8
Earth & Environmental Science ALD	-	-	-	-	22.2	0.3	0.0	22.5	22.5
Energy Geosciences	54.9	16.5	-	71.4	-	-	5.4	5.4	76.8
Energy Sciences	**447.8**	**44.1**	**13.9**	**505.8**	**44.7**	**1.1**	**31.4**	**77.1**	**583.0**
Advanced Light Source	153.7	3.8	13.8	171.3	10.7	-	12.9	23.6	194.9
Chemical Sciences	101.4	4.4	-	105.7	14.6	-	5.4	19.9	125.7
Energy Sciences ALD	-	-	-	-	2.4	-	-	2.4	2.4
Material Sciences	192.7	35.9	0.1	228.8	17.0	1.1	13.1	31.2	260.0

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 49.4 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...

Table 1.4 Continued

Average FTE Breakdown by Area and Division, FY2016 Continued

Division/Area	Direct Funded FTEs				Indirect Funded FTEs				Total FTEs
	DOE Direct Operating	Other Direct Operating (a)	Capital & Equipment	Direct Funded Total	Area/ ORG Burden	Service Centers (b)	Operations Overhead (c)	Indirect Funded Total	
Energy Technologies	**201.5**	**71.6**	**-**	**273.0**	**38.7**	**18.3**	**14.4**	**71.5**	**344.5**
Building Technologies & Urban Systems	54.5	26.0	-	80.5	-	7.3	2.4	9.7	90.2
Cyclotron Road	2.6	-	-	2.6	-	-	3.2	3.2	5.8
Energy Analysis Environmental Impact	80.6	31.0	-	111.5	-	6.9	1.8	8.7	120.2
Energy Storage & Distribution	60.4	14.5	-	74.9	-	4.1	6.0	10.1	85.0
ETA Area Office	3.4	0.1	-	3.5	38.7	-	1.0	39.7	43.2
Physical Sciences	**197.7**	**59.9**	**30.4**	**288.0**	**52.3**	**6.7**	**35.2**	**94.2**	**382.2**
Accelerator Technology & Applied Physics	54.5	31.5	16.0	102.0	8.8	-	5.1	13.9	115.8
Engineering	-	4.7	0.0	4.7	21.3	6.7	9.8	37.8	42.5
Nuclear Science	67.7	18.7	0.8	87.2	10.1	0.0	8.8	18.9	106.1
Physical Sciences ALD	0.0	0.2	-	0.2	1.3	-	4.2	5.5	5.8
Physics	75.4	4.8	13.7	93.9	10.8	-	7.3	18.1	112.0
Directorate & Operations	**22.7**	**0.3**	**3.5**	**26.5**	**34.7**	**25.8**	**675.6**	**736.1**	**762.6**
Chief Financial Officer	-		-	-	-	0.3	143.1	143.4	143.4
Environment, Health, Safety & Security	0.0	-	-	0.0	-	-	93.9	93.9	93.9
Facilities	6.8	-	3.5	10.2	22.6	2.3	177.8	202.7	213.0
Human Resources	-	-	-	-	-	-	54.7	54.7	54.7
Information Technology	7.1	-	-	7.1	12.1	15.9	89.7	117.7	124.8
Laboratory Directorate	0.6	0.3	-	0.9	-	1.3	61.6	62.9	63.8
Operations	-	-	-	-	-	-	19.5	19.5	19.5
Protective Services	5.9	-	-	5.9	-	-	20.1	20.1	26.0
Public Affairs	2.4	-	-	2.4	-	6.0	15.3	21.3	23.7
TOTAL	**1,584.8**	**351.4**	**48.8**	**1,985.1**	**306.0**	**72.7**	**802.7**	**1,181.3**	**3,166.4**

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 49.4 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

Table 1.5

Funds Held for Others Cost Trends, FY2012-FY2016 ($K)

Funding Source	FY2012	FY2013	FY2014	FY2015	FY2016
Royalty	4,080	3,508	3,420	3,031	3,465
Contractor-Funded Institutional Supporting R&D	2,948	3,164	3,381	3,826	4,026
Inter-Location Appointments (ILA)	3,689	2,198	3,215	4,093	3,664
UC Construction Projects	1,030	1,188	1,887	2,188	455
Other	78	79	109	192	20
TOTAL	**11,825**	**10,137**	**12,012**	**13,330**	**11,630**

Note 1: UC Construction costs decreased by 79% (or $1,756K) in FY 16, primarily due to the completion of CRT and SERC buildings.

2. DIRECT FUNDING — DOE & REIMBURSABLE WORK

Total Laboratory Funding

Total Laboratory Funding - $897.5M

Laboratory funding in FY2016 increased nearly $100M over FY2015, which is reflective of program growth, investments in infrastructure, and significant scientific achievement at Lawrence Berkeley National Laboratory.

Office of Science contributed $54M of the increase in support of strategically significant efforts in Advanced Scientific Computing Research and continued funding towards Major Items of Equipment, including Dark Energy Spectroscopic Instrument (DESI) and LUX-ZEPLIN (LZ).

Energy Efficiency and Renewable Energy (EERE) also provided significant funding in FY2016. $30M of the Laboratory's growth in funding was contributed by EERE focused primarily in the Building Technologies area, specifically in Emerging Technologies and Equipment and Building Standards.

Site infrastructure and managing Laboratory growth continues to be an area of focus, as the Science Laboratories Infrastructure (SLI) Program at the Office of Science provided Construction funding for the Integrative Genomics Building (IGB). Operating funds were also provided by Environmental Management (EM) for the demolition and restoration of the Old Town site.

Increases in funding enable Lawrence Berkeley National Laboratory to continue to bring science solutions to the world.

Total Laboratory Costs - $826.9M

While the Laboratory experienced a substantial increase in funding in FY2016, it was accompanied by only a modest increase in spending, as areas of growth were partially offset by the completion of some major efforts in FY2015. FY2016 costs were $827M, approximately $16M greater than FY2015.

Total Office of Science costs remained flat, however the Laboratory experienced a substantial shift ($25M) from Operating to Capital spending. This shift included increases in Major Items of Equipment related to Dark Energy Spectroscopic Instrument (DESI) and LUX-ZEPLIN (LZ), and increases in Line Item Construction Projects, including the Integrative Genomics Building (IGB) and the Long Baseline Neutrino Facility (LBNF). These were offset by a reduction in Operating spending, primarily in Advanced Scientific Computing, as the move and fit-up of Wang Hall was completed in FY2015.

Modest spending increases in National Nuclear Security Administration (NNSA), Environmental Management (EM) and Energy Efficiency and Renewable Energy (EERE) also contributed to the overall increase.

In the area of Sponsored Research, federal spending was down, primarily due to the decline in spending related to National Institutes of Health (NIH) agreements. This was partially offset by an increase in spending on non-federal agreements. Also notable was an increase in work with DOE Integrated Contractors, signaling a close collaboration with other Department of Energy Laboratories.

Refer to Section 1, Institutional Information, for more information regarding how program dollars were spent in FY2016.

Table 2.1

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

LBNL Fund Trends (BA) by funding source ($K)	FY2012	FY2013	FY2014	FY2015	FY2016
DOE DIRECT OPERATING					
Administrator for National Nuclear Security Administration	7,009	14,399	7,187	14,130	13,369
Advanced Research Projects Agency - Energy	2,993	4,131	993	1,779	3,033
Assistant Secretary for Electricity Delivery & Energy Reliability	8,743	8,485	7,873	8,106	10,145
Assistant Secretary for Energy Efficiency and Renewable Energy	65,678	78,423	69,471	61,016	91,435
Assistant Secretary for Environmental Management	1,371	20,523	18,824	863	16,715
Assistant Secretary for Fossil Energy	8,316	5,215	6,384	7,799	7,263
Assistant Secretary for Nuclear Energy	2,877	2,930	3,040	2,414	2,519
Assistant Secretary for Policy and International Affairs	50	200	425	2,958	3,773
Loan Programs Office	-	15	(0)	-	-
Office of Energy and Threat	109	138	177	158	179
Office of Energy Policy & Systems Analysis			200	2,066	1,862
Office of Environment, Health, Safety and Security	57	34	48	1,540	310
Office of Indian Energy Policy & Programs			229	-	35
Office of Legacy Management	-	150	-	195	169
Office of Management	-	-	(1)	-	-
Office of Science	497,738	506,725	527,907	533,386	548,159
Office of the Chief Information Officer	-	-	-	-	200
Total DOE Direct Operating	**594,941**	**641,370**	**642,758**	**636,409**	**699,165**
OTHER DIRECT OPERATING (a)					
Federal Agencies	56,401	62,667	55,953	53,330	51,519
Non-Federal Sponsors (b)	53,460	57,737	51,967	55,066	52,376
Cooperative Research and Development Agreements	417	1,192	1,019	2,175	2,588
DOE Integrated Contractors (c)	13,437	17,537	18,884	19,292	23,328
Total Other Direct Operating	**123,716**	**139,132**	**127,824**	**129,864**	**129,810**
TOTAL OPERATING	**718,657**	**780,502**	**770,582**	**766,274**	**828,975**

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) FY2012 and FY2013 ARRA National Institutes of Health (NIH) and National Science Foundation (NSF) awards were obligated to Berkeley Lab by DOE as work for a Non-Federal entity to accommodate OMB apportionment requirements for ARRA. For reporting consistency with prior and future years, all NIH and NSF funding and cost data is reflected under the Sponsored Partnership Projects category.
(b) Includes both funding and deobligations for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program
(c) Total funding for Integrated Contractors is assumed to be equal to cost incurred.

continued...

Table 2.1 Continued

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

LBNL Fund Trends (BA) by funding source ($K)	FY2012	FY2013	FY2014	FY2015	FY2016
DOE PLANT AND CAPITAL EQUIPMENT					
Basic Equipment/Major Items of Equipment					
Administrator for National Nuclear Security Administration	-	-	-	2,570	1,375
Assistant Secretary for Energy Efficiency and Renewable Energy	-	-	-	900	990
Office of Science	10,612	11,081	12,514	14,076	39,889
Total DOE Capital Equipment	**10,612**	**11,080**	**12,514**	**17,546**	**42,254**
General Plant Projects					
Office of Science	-	1,250	(13)	-	-
Accelerator Improvement Projects					
Office of Science	3,000	550	1,250	1,800	1,000
Line-Item Construction					
Assistant Secretary for Energy Efficiency and Renewable Energy	-	-	-	-	-
Office of Science	12,972	(2)	(8)	12,090	25,250
Total DOE Plant	**15,972**	**1,798**	**1,228**	**13,890**	**26,250**
TOTAL DOE PLANT AND CAPITAL EQUIPMENT	**26,584**	**12,878**	**13,742**	**31,436**	**68,504**
TOTAL LABORATORY	**745,241**	**793,380**	**784,324**	**797,710**	**897,479**

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) FY2012 and FY2013 ARRA National Institutes of Health (NIH) and National Science Foundation (NSF) awards were obligated to Berkeley Lab by DOE as work for a Non-Federal entity to accommodate OMB apportionment requirements for ARRA. For reporting consistency with prior and future years, all NIH and NSF funding and cost data is reflected under the Sponsored Partnership Projects category.
(b) Includes both funding and deobligations for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program.
(c) Total funding for Integrated Contractors is assumed to be equal to cost incurred.

Table 2.2

Berkeley Lab Cost Trends by Funding Source ($K)

LBNL Cost Trends by Funding Source ($K)	FY2012	FY2013	FY2014	FY2015	FY2016
DOE DIRECT OPERATING					
Administrator for National Nuclear Security Administration	7,026	9,310	9,886	11,764	13,698
Advanced Research Projects Agency - Energy	2,517	3,651	3,074	1,609	1,614
Assistant Secretary for Electricity Delivery & Energy Reliability	8,470	7,479	8,517	9,635	9,136
Assistant Secretary for Energy Efficiency and Renewable Energy	71,739	68,584	75,239	73,493	76,135
Assistant Secretary for Environmental Management	1,842	2,138	5,327	7,828	9,858
Assistant Secretary for Fossil Energy	9,624	9,817	6,586	8,020	8,037
Assistant Secretary for Nuclear Energy	3,091	3,072	2,574	2,359	2,728
Assistant Secretary for Policy and International Affairs	98	76	330	189	1,461
Loan Programs Office	-	15	-	-	-
Office of Energy and Threat	132	164	168	174	182
Office of Energy Policy & Systems Analysis	-	-	200	419	2,296
Office of Environment, Health, Safety and Security	37	40	35	229	1,264
Office of Indian Energy Policy & Programs	-	-	-	128	134
Office of Legacy Management	-	-	123	119	215
Office of Management	-	-	-	-	-
Office of Science	505,375	508,623	505,965	551,302	526,749
Office of the Chief Information Officer	-	-		-	8
Total DOE Direct Operating	**609,950**	**612,968**	**618,024**	**667,268**	**653,515**
OTHER DIRECT OPERATING					
Federal Agencies	68,687	62,538	60,725	57,036	49,724
Non-Federal Sponsors (a)	56,360	56,111	54,690	49,131	54,112
Cooperative Research and Development Agreements	980	1,204	1,095	2,114	2,469
DOE Integrated Contractors	13,437	17,537	18,884	19,292	23,328
Total Other Direct Operating	**139,464**	**137,391**	**135,394**	**127,573**	**129,633**
TOTAL OPERATING	**749,413**	**750,359**	**753,418**	**794,841**	**783,148**

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) FY2016 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 FY2016 is ($719K).

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Table 2.2 Continued

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

LBNL Cost Trends by Funding Source ($K)	FY2012	FY2013	FY2014	FY2015	FY2016
DOE PLANT AND CAPITAL EQUIPMENT					
Basic Equipment/Major Items of Equipment					
Administrator for National Nuclear Security Administration	-	-	-	716	3,021
Assistant Secretary for Energy Efficiency and Renewable Energy	1,567	742	-	884	1,005
Office of Science	28,306	24,773	20,004	9,855	28,759
Total DOE Capital Equipment	**29,874**	**25,515**	**20,004**	**11,456**	**32,785**
General Plant Projects					
Office of Science	3,220	1,769	552	514	62
Accelerator Improvement Projects					
Office of Science	6,985	6,622	3,430	2,120	2,345
Line-Item Construction					
Assistant Secretary for Energy Efficiency and Renewable Energy	2,036	8,262	3,991	170	-
Office of Science	27,565	26,715	3,521	2,174	8,558
Total DOE Plant	**39,807**	**43,368**	**11,495**	**4,979**	**10,966**
TOTAL DOE PLANT AND CAPITAL EQUIPMENT	**69,680**	**68,882**	**31,499**	**16,434**	**43,751**
TOTAL LABORATORY (b)	**819,093**	**819,242**	**784,917**	**811,276**	**826,899**

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) FY2016 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 FY2016 is ($719K).

Table 2.3

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

Funding and Cost by Source ($K)	FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
DOE DIRECT OPERATING				
Administrator for National Nuclear Security Administration	7,819	13,369	13,698	7,490
Advanced Research Projects Agency - Energy	2,362	3,033	1,614	3,781
Assistant Secretary for Electricity Delivery & Energy Reliability	10,426	10,145	9,136	11,435
Assistant Secretary for Energy Efficiency & Renewable Energy	48,041	91,435	76,135	63,347
Assistant Secretary for Environmental Management	25,697	16,715	9,858	32,553
Assistant Secretary for Fossil Energy	9,590	7,263	8,037	8,818
Assistant Secretary for Nuclear Energy	1,082	2,519	2,728	872
Assistant Secretary for Policy and International Affairs	3,066	3,773	1,461	5,377
Loan Programs Office	-	-	-	-
Office of Energy & Threat	48	179	182	46
Office of Energy Policy & Systems Analysis	1,686	1,862	2,296	1,253
Office of Environment, Health, Safety and Security	1,345	310	1,264	391
Office of Indian Energy Policy & Programs	101	35	134	1
Office of Legacy Management	104	169	215	58
Office of Management	-	-	-	-
Office of Science	227,308	548,159	526,749	248,735
Office of the Chief Information Officer	-	200	8	192
Total DOE Direct Operating	**338,673**	**699,165**	**653,515**	**384,347**
OTHER DIRECT OPERATING				
Federal Agencies	45,658	51,519	49,724	47,854
Non-Federal Sponsors (a)	32,627	52,376	54,112	31,157
Cooperative Research and Development Agreements	588	2,588	2,469	734
DOE Integrated Contractors (b)	-	23,328	23,328	-
Total Other Direct Operating (c)	**78,873**	**129,810**	**129,633**	**79,745**
TOTAL OPERATING	**417,546**	**828,975**	**783,148**	**464,092**

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 FY2016 Beginning Uncosted Obligations, FY2016 Funds, minus, FY2016 Costs does not equal FY2016 Ending Uncosted Obligations due to various adjustments not reflected in the FY2016 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2016 is ($719K).

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Table 2.3 Continued

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

Funding and Cost by Source ($K)	FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
DOE PLANT AND EQUIPMENT				
Basic Equipment/Major Items of Equipment				
Administrator for National Nuclear Security Administration	1,854	1,375	3,021	208
Assistant Secretary for Energy Efficiency & Renewable Energy	16	990	1,005	0
Office of Science	22,533	39,889	28,759	33,662
Total Capital Equipment	**24,403**	**42,254**	**32,785**	**33,871**
General Plant Projects				
Office of Science	70	-	62	8
Accelerator Improvement Projects				
Office of Science	2,324	1,000	2,345	979
Line-Item Construction				
Assistant Secretary for Energy Efficiency & Renewable Energy	-	-	-	-
Office of Science	10,093	25,250	8,558	26,785
Total DOE Plant	**12,488**	**26,250**	**10,966**	**27,772**
TOTAL DOE PLANT AND CAPITAL EQUIPMENT	**36,890**	**68,504**	**43,751**	**61,643**
TOTAL LABORATORY	**454,436**	**897,479**	**826,899**	**525,735**

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 FY2016 Beginning Uncosted Obligations, FY2016 Funds, minus, FY2016 Costs does not equal FY2016 Ending Uncosted Obligations due to various adjustments not reflected in the FY2016 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2016 is ($719K).

Table 2.4

FY2016 Funding and Costs by DOE Programs ($K)

ADMINSTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
CT84	Emergency Response	-	180	178	2
DN20	DNN Research and Development	-	5,475	4,199	1,276
DN40	Nonproliferation and Arms Control	-	40	33	7
DP09	Infrastructure and Operations (formerly RTBF)	439	1,800	448	1,792
DP15	Advanced Simulation and Computing	3,941	5,000	6,406	2,535
DP40	Nuclear Counterterrorism Incident Response	1	-	1	0
M001	Cyber Security	1,422	874	536	1,760
NN20	Defense Nuclear Nonproliferation Research and Development (DNN R&D)	2,011	0	1,891	120
NN40	Nonproliferation and International Security (NIS)	5	-	5	0
Total Operating		**7,819**	**13,369**	**13,698**	**7,490**
CAPITAL EQUIPMENT					
DN20	DNN Research and Development	-	1,375	1,252	123
NN20	Defense Nuclear Nonproliferation Research and Development (DNN R&D)	1,854	(0)	1,769	85
Total Capital Equipment (a)		**1,854**	**1,375**	**3,021**	**208**
TOTAL ADMINSTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION		**9,673**	**14,744**	**16,719**	**7,698**

Note: Minor variances may occur due to rounding.
(a) The sum of FY2016 Beginning Uncosted Obligations, FY2016 Funds, minus, FY2016 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2016 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2016 is ($719K).

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Table 2.4 Continued

FY2016 Funding and Costs by DOE Programs ($K) Continued

ADMINSTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION OFFICE OF SCIENCE		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
AT10	Burning Plasma Science: Foundations	44	1,000	43	1,001
AT40	Discovery Plasma Science	944	1,516	1,476	984
AT50	FES - Science	113	-	95	18
FS10	Safeguards and Security - Science	2,421	7,196	7,010	2,607
KA11	Proton Accelerator-Based Physics	38	(38)	-	-
KA14	Theoretical Physics	19	-	19	0
KA15	Advanced Technology R&D (prior to restructure)	1	(0)	1	-
KA21	Energy Frontier Experimental Physics	4,095	8,175	8,139	4,131
KA22	Intensity Frontier Experimental Physics	3,522	17,842	19,793	1,571
KA23	Cosmic Frontier Experimental Physics	4,655	10,115	10,157	4,613
KA24	Theoretical and Computational Physics	3,106	5,235	5,510	2,831
KA25	Advanced Technology R&D	4,803	18,644	18,205	5,242
KA26	Accelerator Stewardship	378	688	993	73
KB01	Medium Energy Physics	136	544	391	288
KB02	Heavy-Ion Physics	696	5,913	5,359	1,314
KB03	Nuclear Theory	1,314	3,258	3,169	1,403
KB04	Low Energy Physics	3,510	10,288	10,898	2,899
KC02	Materials Sciences and Engineering	10,440	27,981	27,998	10,423
KC03	Chemical Sciences, Geosciences, and Biosciences	20,761	36,647	37,762	19,646
KC04	Scientific User Facilities	22,659	92,403	86,166	28,862
KJ04	Mathematical, Computational, and Computer Sciences Research	44,096	29,939	30,876	43,160
KJ05	High Performance Computing and Network Facilities	48,741	119,300	104,368	63,663
KL10	Internships and Visiting Faculty Activities at DOE Labs	966	1,302	1,520	748
KP12	Climate Change Research	57	(0)	29	28
KP15	Biological Research	41	(0)	1	40
KP16	Biological Systems Science	28,321	119,756	118,682	29,394
KP17	Climate and Environmental Sciences	21,430	30,405	28,041	23,795
ST50	Isotope Research	-	50	50	0
Total Operating (a)		**227,308**	**548,159**	**526,749**	**248,735**

Note: Minor variances may occur due to rounding.

(a) The sum of FY2016 Beginning Uncosted Obligations, FY2016 Funds, minus, FY2016 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2016 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2016 is ($719K).

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Table 2.4 Continued

FY2016 Funding and Costs by DOE Programs ($K) Continued

OFFICE OF SCIENCE		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
CAPITAL EQUIPMENT					
AT40	Discovery Plasma Science	321	950	347	923
AT50	FES - Science	7	-	7	0
FS10	Safeguards and Security - Science	-	600	-	600
KA11	Proton Accelerator-Based Physics	1	(0)	0	-
KA15	Advanced Technology R&D (prior to restructure)	23	(23)	-	-
KA22	Intensity Frontier Experimental Physics	695	-	3	692
KA23	Cosmic Frontier Experimental Physics	905	20,300	12,899	8,306
KA25	Advanced Technology R&D	479	2,750	2,141	1,089
KA26	Accelerator Stewardship	119	540	459	200
KB02	Heavy-Ion Physics	-	605	3	602
KB04	Low Energy Physics	3,728	1,600	2,770	2,558
KC02	Materials Sciences and Engineering	71	700	34	737
KC03	Chemical Sciences, Geosciences, and Biosciences	10	-	3	8
KC04	Scientific User Facilities	5,929	9,670	5,156	10,443
KJ05	High Performance Computing and Network Facilities	4,589	4,700	4,662	4,627
KP16	Biological Systems Science	5,657	(2,503)	275	2,878
Total Capital Equipment (a)		**22,533**	**39,889**	**28,759**	**33,662**
GENERAL PLANT PROJECTS					
FS10	Safeguards and Security - Science	70	-	62	8
Total General Plant Projects (a)		**70**	**0**	**62**	**8**
ACCELERATOR IMPROVEMENT PROJECTS					
KC04	Scientific User Facilities	2,324	1,000	2,345	979
Total Accelerator Improvement Projects (a)		**2,324**	**1,000**	**2,345**	**979**
LINE-ITEM CONSTRUCTION					
39KA	High Energy Physics	-	5,320	4,001	1,319
39KG	Science Laboratories Infrastructure	10,093	19,930	4,557	25,466
Total Line-Item Construction (a)		**10,093**	**25,250**	**8,558**	**26,785**
TOTAL DOE PLANT		**12,488**	**26,250**	**10,966**	**27,772**
TOTAL OFFICE OF SCIENCE		**262,328**	**614,298**	**566,475**	**310,169**

Note: Minor variances may occur due to rounding.
(a) The sum of FY2016 Beginning Uncosted Obligations, FY2016 Funds, minus, FY2016 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2016 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2016 is ($719K).

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Table 2.4 Continued

FY2016 Funding and Costs by DOE Programs ($K) Continued

ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
BM01	Biomass/Biofuels Energy Systems	6,021	5,811	7,163	4,669
BR01	EE Departmental Admin, Rec Act	0	-	-	0
BT01	Residential Buildings Integration	1,183	1,805	2,194	793
BT02	Commercial Buildings Integration	4,846	7,724	7,575	5,000
BT03	Emerging Technologies	964	10,465	3,601	7,828
BT04	Equipment and Buildings Standards	5,835	19,682	16,880	8,636
BT08	EE Building Systems Design Energy Innovation Hubs	100	-	100	0
EB21	Solar Energy	18	(1)	-	17
EB25	Wind Energy Systems	0	(0)	-	-
EB36	Facilities and Infrastructure	-	-	-	-
EB40	Geothermal Technologies	439	(0)	282	157
EB42	Hydrogen Research R&D	7	-	0	7
EB51	Energy Efficiency and Renewable Energy Program Direction	-	-	-	-
EB57	Energy Efficiency and Renewable Energy (EERE) Program Support	30	-	4	26
ED19	Industries Of The Future (Crosscutting)	27	(0)	8	19
ED20	Industrial Technical Assistance	2,521	4,410	3,343	3,588
ED27	Next Generation Manufacturing R&D Projects	6,923	4,891	3,473	8,342
ED28	Advanced Manufacturing R&D Facilities	13	-	13	0
EL17	Federal Energy Management Program	1,630	4,030	3,949	1,712
GT01	Enhanced Geothermal Systems	3,485	2,313	3,145	2,653
GT02	Low Temperature and Co-produced Resource	503	915	603	815
GT03	Hydrothermal	2,098	1,399	1,799	1,698
GT04	Systems Analysis	325	273	214	384
HT01	Fuel Cell Systems R&D	441	1,984	1,766	659
HT02	Hydrogen Fuel R&D	1,969	1,908	1,976	1,901
HT05	Safety, Codes & Standards	-	7	-	7
HT07	Manufacturing R&D	77	313	223	167
HT08	Technology Validation	-	614	86	529
PG03	Strategic Priorities and Impact Analysis	837	800	615	1,022
PG04	Technology-to-Market	293	875	239	929
PG05	International	229	575	562	242
SL01	Concentrating Solar Power	55	(0)	16	38

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Table 2.4 Continued

FY2016 Funding and Costs by DOE Programs ($K) Continued

ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
SL02	Photovoltaic R&D	57	-	6	51
SL03	Systems Integration (Balance of Systems and Power Electronics)	388	2,040	694	1,734
SL04	Balance of Systems Soft Cost Reduction	1,276	2,603	1,570	2,309
SL05	Innovations in Manufacturing Competitiveness	487	-	448	39
VT02	Outreach, Deployment & Analysis	223	790	253	760
VT04	Advanced Combustion and Engine R&D	0	-	-	0
VT05	Materials Technology	107	356	340	123
VT06	Fuels Technology	-	100	83	17
VT11	Hybrid Electric Systems	3	-	3	0
VT12	Batteries and Electric Drive Technology	2,990	11,530	10,149	4,371
VT13	Vehicle & Systems Simulation and Testing	153	1,009	505	657
WC01	Water Power Program	34	47	58	23
WI03	State Energy Program (Grants)	806	760	841	725
WI04	Other State Energy Activities	1	-	1	0
WI06	Intergovernmental Activities	129	-	66	62
WI07	Weatherization Assistance Program	13	150	159	4
WI12	Weatherization Innovation	-	50	33	17
WW02	Technology Viability	75	-	52	23
WW03	Technology Application	431	(0)	404	27
WW08	Mitigate Market Barriers	-	477	276	201
WW09	Modeling & Analysis	-	730	367	363
Total Operating		**48,041**	**91,435**	**76,135**	**63,347**
CAPITAL EQUIPMENT					
BT04	Equipment and Buildings Standards	16	-	15	0
ED27	Next Generation Manufacturing R&D Projects	-	990	990	0
Total Capital Equipment (a)		**16**	**990**	**1,005**	**0**
LINE-ITEM CONSTRUCTION					
39EB	Facilities and Infrastructure	-	-	-	-
Total Line-Item Construction (a)		**0**	**0**	**0**	**0**
TOTAL DOE PLANT		**0**	**0**	**0**	**0**
TOTAL ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY		**48,056**	**92,425**	**77,140**	**63,347**

Note: Minor variances may occur due to rounding.
(a) The sum of FY2016 Beginning Uncosted Obligations, FY2016 Funds, minus, FY2016 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2016 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2016 is ($719K).

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Table 2.4 Continued

FY2016 Funding and Costs by DOE Programs ($K) Continued

ASSISTANT SECRETARY FOR ELECTRICITY DELIVERY & ENERGY RELIABILTY		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
TD50	Research and Development	53	-	39	14
TD54	Operations & Analysis	2	-	2	0
TE11	Clean Energy Transmission & Reliability	4,689	3,970	3,807	4,852
TE12	Smart Grid Research and Development	1,736	2,489	2,126	2,099
TE13	Cyber Security for Energy Delivery Systems	-	609	115	495
TE14	Energy Storage	1	45	1	45
TE15	Transformer Resilience & Advanced Components	-	29	19	11
TF00	National Electricity Delivery	3,943	3,001	3,026	3,919
TG01	Infrastructure Security and Energy Restoration	2	-	2	0
Total Operating		**10,426**	**10,145**	**9,136**	**11,435**
TOTAL ASSISTANT SECRETARY FOR ELECTRICITY DELIVERY & ENERGY RELIABILITY		**10,426**	**10,145**	**9,136**	**11,435**

Note: Minor variances may occur due to rounding.

ASSISTANT SECRETARY FOR FOSSIL ENERGY		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
AA15	Advanced Research	4	-	-	4
AA20	Central Systems	14	-	-	14
AA25	Fuel Cells	3	-	-	3
AA30	Sequestration	292	-	74	217
AA60	Advanced Energy Systems	0	-	-	0
AA65	Carbon Capture	50	-	22	28
AA70	Carbon Storage	3,456	3,164	3,045	3,577
AA90	Cross Cutting Research	4,730	2,369	3,719	3,380
AB05	Natural Gas Technologies	782	1,655	1,089	1,348
AC10	Oil Technology	80	-	4	76
AD20	Contractual Services And Supplies	72	-	26	45
AY05	Clean Coal Power Initiative	13	-	13	0
BD00	Unconventional Fossil Energy Technologies	93	75	43	125
CE03	Center for Zero Emissions Technology - Montana State	0	-	-	0
CE47	Innovations for Low-Cost Gasification Systems	1	-	-	1
CE54	Design and Test of an Advanced SOFC Generator in PA	0	-	-	0
Total Operating		**9,590**	**7,263**	**8,037**	**8,818**
TOTAL ASSISTANT SECRETARY FOR FOSSIL ENERGY		**9,590**	**7,263**	**8,037**	**8,818**

Note: Minor variances may occur due to rounding.

continued...

Table 2.4 Continued

FY2016 Funding and Costs by DOE Programs ($K) Continued

ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
EY40	Defense Site Acceleration Completion - Technology Development and Deployment	232	125	271	85
EY80	Defense Environmental Cleanup - Program Support	16	-	15	1
EZ50	Non-Defense Environmental Cleanup - Small Sites	25,449	16,590	9,572	32,466
Total Operating		**25,697**	**16,715**	**9,858**	**32,553**
TOTAL ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT		**25,697**	**16,715**	**9,858**	**32,553**
Note: Minor variances may occur due to rounding.					

OFFICE OF ENVIRONMENT, HEALTH, SAFETY & SECURITY		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
HQ10	Employee Compensation	34	20	44	10
HU10	Corporate Safety Program	1,311	290	1,220	381
Total Operating		**1,345**	**310**	**1,264**	**391**
TOTAL OFFICE OF HEALTH SAFETY AND SECURITY		**1,345**	**310**	**1,264**	**391**
Note: Minor variances may occur due to rounding.					

ASSISTANT SECRETARY FOR NUCLEAR ENERGY		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
AF58	Fuel Cycle Research and Development (FCR&D)	1,045	2,020	2,607	457
DF01	First Repository	18	-	-	18
NT05	Nuclear Energy Advanced Modeling and Simulation	19	499	121	397
RC04	Advanced Reactor Concepts (ARC)	0	-	-	0
Total Operating		**1,082**	**2,519**	**2,728**	**872**
TOTAL ASSISTANT SECRETARY FOR NUCLEAR ENERGY		**1,082**	**2,519**	**2,728**	**872**
Note: Minor variances may occur due to rounding.					

continued...

Table 2.4 Continued

FY2016 Funding and Costs by DOE Programs ($K) Continued

OFFICE OF INDIAN ENERGY POLICY & PROGRAMS		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
IP10	Salaries & Benefits	101	-	100	1
IP20	Support Services	-	35	34	1
Total Operating		**101**	**35**	**134**	**1**
TOTAL OFFICE OF INDIAN ENERGY POLICY & PROGRAMS		**101**	**35**	**134**	**1**
Note: Minor variances may occur due to rounding.					

OFFICE OF LEGACY MANAGEMENT		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
LM01	Legacy Management Activities - Defense	104	169	215	58
Total Operating		**104**	**169**	**215**	**58**

OFFICE OF ENERGY AND THREAT		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
GD50	Cyber	48	-	46	2
GD60	Energy and Threat-Program	-	179	135	44
Total Operating		**48**	**179**	**182**	**46**
TOTAL OFFICE OF ENERGY AND THREAT		**48**	**179**	**182**	**46**
Note: Minor variances may occur due to rounding.					

ASSISTANT SECRETARY FOR POLICY AND INTERNATIONAL AFFAIRS		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
PE04	Office Of Environmental Analysis	66	-	50	16
PE06	Climate Change Technology Program-International	41	-	39	3
WA22	Office of International Affairs - Program Direction	2,958	3,773	1,372	5,359
Total Operating		**3,066**	**3,773**	**1,461**	**5,377**
TOTAL ASSISTANT SECRETARY FOR POLICY AND INTERNATIONAL AFFAIRS		**3,066**	**3,773**	**1,461**	**5,377**
Note: Minor variances may occur due to rounding.					

continued...

Table 2.4 Continued

FY2016 Funding and Costs by DOE Programs ($K) Continued

ADVANCED RESEARCH PROJECTS AGENCY - ENERGY		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
CJ01	ARPA-E Projects	2,345	3,033	1,604	3,773
CJ02	Program Direction	17	-	10	7
Total Operating		**2,362**	**3,033**	**1,614**	**3,781**
TOTAL ADVANCED RESEARCH PROJECTS AGENCY - ENERGY		**2,362**	**3,033**	**1,614**	**3,781**
Note: Minor variances may occur due to rounding.					

OFFICE OF ENERGY POLICY & SYSTEMS ANALYSIS		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
EP01	EPSA Program Direction	1,684	1,862	2,294	1,252
EP02	Climate Change Technology	0	-	-	0
PE01	Policy, Planning and Analysis	2	-	2	0
	Total Operating	**1,686**	**1,862**	**2,296**	**1,253**

OFFICE OF THE CHIEF INFORMATION OFFICER		FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
OPERATING					
CS70	Integrated Joint Cybersecurity Coordination Center (iJC3)	-	200	8	192
Total Operating		**0**	**200**	**8**	**192**

All DOE Programs ($K)	FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
TOTAL OPERATING	**338,673**	**699,165**	**653,515**	**384,347**
TOTAL CAPITAL EQUIPMENT	**24,403**	**42,254**	**32,785**	**33,871**
TOTAL GENERAL PLANT PROJECTS	**70**	**-**	**62**	**8**
TOTAL ACCELERATOR IMPROVEMENT PROJECTS	**2,324**	**1,000**	**2,345**	**979**
TOTAL LINE ITEM CONSTRUCTION	**10,093**	**25,250**	**8,558**	**26,785**
TOTAL FUNDING AND COSTS	**375,563**	**767,669**	**697,267**	**445,990**

Note: Minor variances may occur due to rounding.
(a) The sum of FY2016 Beginning Uncosted Obligations, FY2016 Funds, minus, FY2016 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2016 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2016 is ($719K).

Table 2.5

FY2016 Funding and Costs by Other Direct Operating Source ($K)

Funding Source	FY2016 Beginning Uncosted Obligations	FY2016 Funds	FY2016 Costs	FY2016 Ending Uncosted Obligations
REIMBURSABLE WORK				
Federal Agencies				
Department Of Agriculture	98	-	41	58
Department Of Defense	13,963	16,065	13,364	16,782
Department of Homeland Security - Borders and Transportation	391	191	190	391
Department of Homeland Security - Domestic Nuclear Detection Office	1,170	3,827	3,735	1,263
Department of Homeland Security - Science and Technology	1,005	464	1,450	22
Department Of Housing And Urban Development	64	388	269	191
Department Of State - Other	2,734	1,355	821	1,238
Department Of The Interior	259	284	480	77
Environmental Protection Agency	484	992	789	709
National Aeronautics And Space Administration	1,732	3,741	2,786	2,768
National Institutes of Health	22,208	22,384	22,000	22,617
National Science Foundation	182	48	151	83
Nuclear Regulatory Commission	366	134	192	314
Other Federal Agencies	992	1,645	3,459	1,328
Other Federal Agencies - Defense-Related Activities	0	-	(0)	
Other Federal Agencies - Energy-Related Activities	8	-	(5)	12
Total Federal Agencies	**45,658**	**51,519**	**49,724**	**47,854**
Non-Federal Agencies				
Foreign Governments (a)	257	1,846	1,491	656
Domestic and Foreign Industry	8,757	21,663	21,802	9,013
State and Local Governments & NPOs (a)	18,671	15,694	19,275	15,082
Universities and Institutes (a)	4,942	13,174	11,545	6,406
Total Non-Federal Agencies	**32,627**	**52,376**	**54,112**	**31,157**
Cooperative Research and Development Agreements				
CRADA - Other	502	2,169	2,076	617
CRADA - Small Business	86	418	393	117
Total Cooperative Research and Development Agreements	**588**	**2,588**	**2,469**	**734**
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.				
TOTAL REIMBURSABLE WORK	**78,872**	**106,482**	**106,305**	**79,745**
DOE INTEGRATED CONTRACTORS				
Work Performed for Other DOE Locations (b)	-	23,328	23,328	-
Total DOE Integrated Contractors	**-**	**23,328**	**23,328**	**-**
TOTAL OTHER DIRECT OPERATIONG (c)	**78,872**	**129,810**	**129,633**	**79,745**
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. FY2016 Ending Uncosted Obligations due to various adjustments not reflected in the FY2016 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2016 is ($719K). (c) The sum of FY2016 Beginning Uncosted Obligations, FY2016 Funds, minus, FY2016 Costs does not equal FY2016 Ending Uncosted Obligations due to various adjustments not reflected in the FY2016 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2016 is ($719K).				

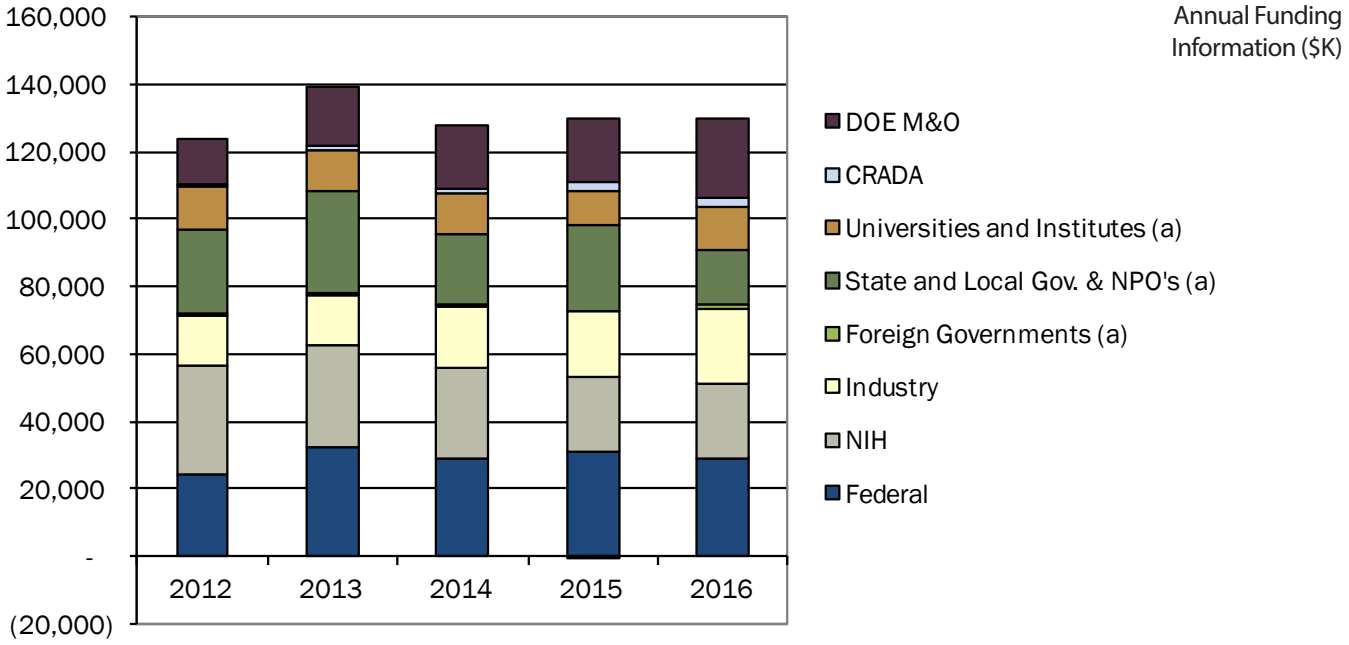
Table 2.6

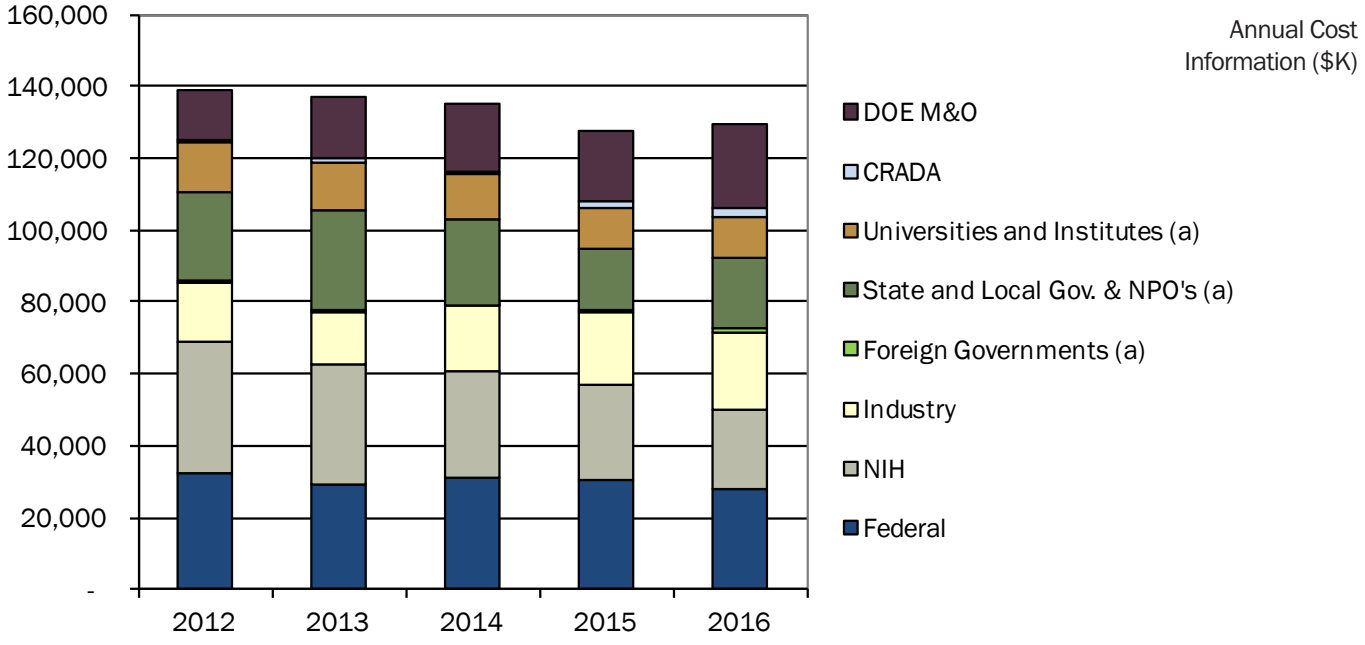
Total Funding Amounts by Area and Division for Each Fiscal Year ($K)

Area and Division	FY2012	FY2013	FY2014	FY2015	FY2016
Biosciences	**172,930**	**173,061**	**174,359**	**173,539**	**166,741**
Biological Systems & Engineering	-	-	-	-	40,785
Environmental Genomics & System Biology	-	-	-	-	17,644
Joint Genome Institute	-	-	-	-	70,884
Molecular Biophysics & Integrated Bioimaging	-	-	-	-	37,429
Genomics	75,926	73,130	77,853	79,476	-
Life Sciences	40,488	37,760	32,395	29,174	-
Physical Biosciences	56,515	62,171	64,112	64,889	-
Computing Sciences	**123,864**	**144,178**	**146,947**	**165,127**	**174,134**
Computational Research	-	-	-	42,698	33,671
National Energy Research Scientific Computing Center	-	-	-	81,773	96,973
Scientific Networking	-	-	-	40,656	43,489
Computing Sciences	123,864	144,178	146,947	-	-
Earth & Environmental Sciences	**58,189**	**53,296**	**66,807**	**65,148**	**64,679**
Climate & Ecosystems	-	-	-	-	38,843
Energy Geosciences	-	-	-	-	25,836
Earth Sciences	58,189	53,296	66,807	65,148	-
Energy Sciences	163,469	168,206	156,847	155,628	173,469
Advanced Light Source	65,210	63,451	63,188	66,238	74,439
Chemical Sciences	21,335	26,108	21,350	21,795	27,988
Material Sciences	76,923	78,647	72,309	67,596	71,043
Energy Technologies	**99,720**	**115,737**	**98,817**	**98,048**	**125,708**
Building Technologies & Urban Systems	-	-	-	-	40,138
Cyclotron Road	-	-	-	-	2,345
Energy Analysis & Environmental Impacts	-	-	-	-	46,722
Energy Storage & Distributed Resources	-	-	-	-	36,502
Environmental Energy Technologies	99,720	115,737	98,817	98,048	
Physical Sciences	**108,206**	**112,061**	**117,514**	**122,725**	**147,270**
Accelerator Technology & Applied Physics	32,348	24,910	28,540	36,986	37,461
Engineering	2,981	5,085	4,754	3,595	2,132
Nuclear Science	34,439	34,281	33,543	31,916	35,304
Physics	38,438	47,785	50,676	50,229	72,373
Directorate & Operations	**18,862**	**26,842**	**23,033**	**17,495**	**45,477**
Chief Financial Officer	1,974	1,030	(2,146)	(2,612)	(802)
Environment, Health, Safety & Security	3,397	(801)	7	-	-
Facilities	10,510	19,348	17,588	12,153	36,520
Information Technology	2,185	2,130	2,605	2,384	4,139
Laboratory Directorate	145	(192)	20	173	592
Operations	650	1,586	1,376	106	123
Protective Services	-	3,741	3,584	3,589	3,603
Public Affairs	-	-	-	1,702	1,302
GRAND TOTAL	**745,241**	**793,380**	**784,324**	**797,710**	**897,479**

Figure 2.1

FY2016 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.

3. INDIRECT BUDGETS

Figure 3.1

Indirect Budgets — FY2016 Costs ($M)

Indirect Budgets (a)	FY2016 Costs ($M)
G&A (Includes Site Support)	183.7
ALD & Organizational Burden	58.6
Service Centers (b)	43.3
LDRD	24.5
Procurement	13.8
IGPP	8.6
Travel	1.2
Other (c)	0.2
Total	**334.0**

(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 FY2016, LDRD cost includes $7.4M 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.

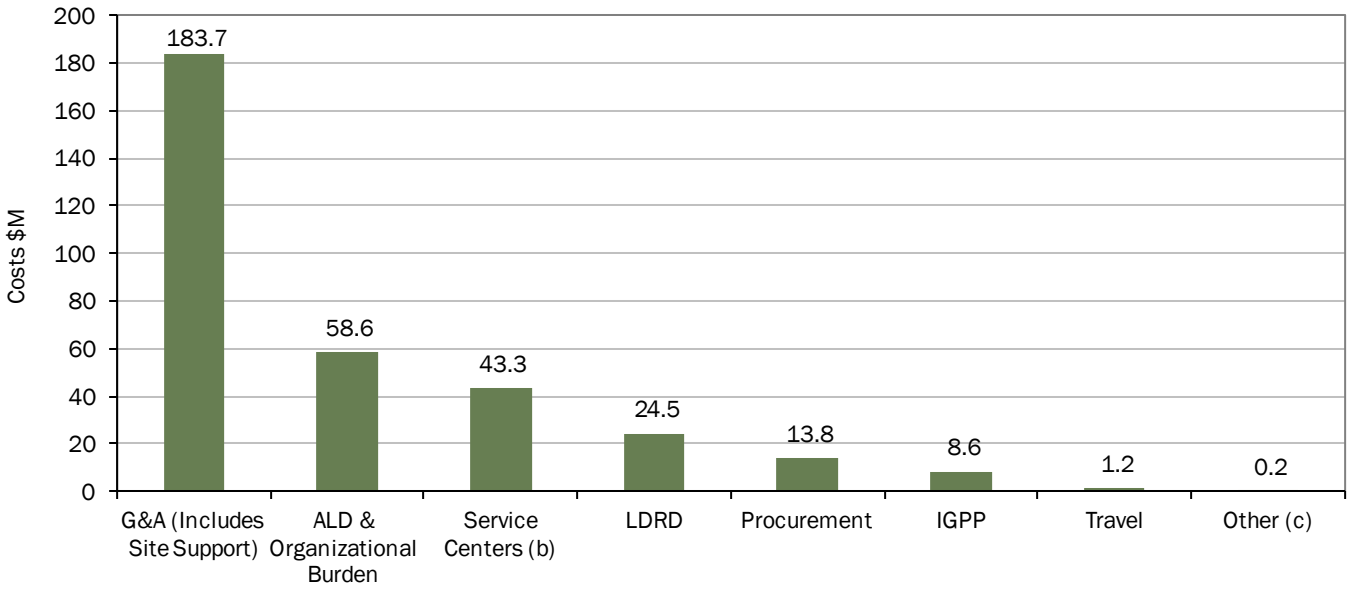
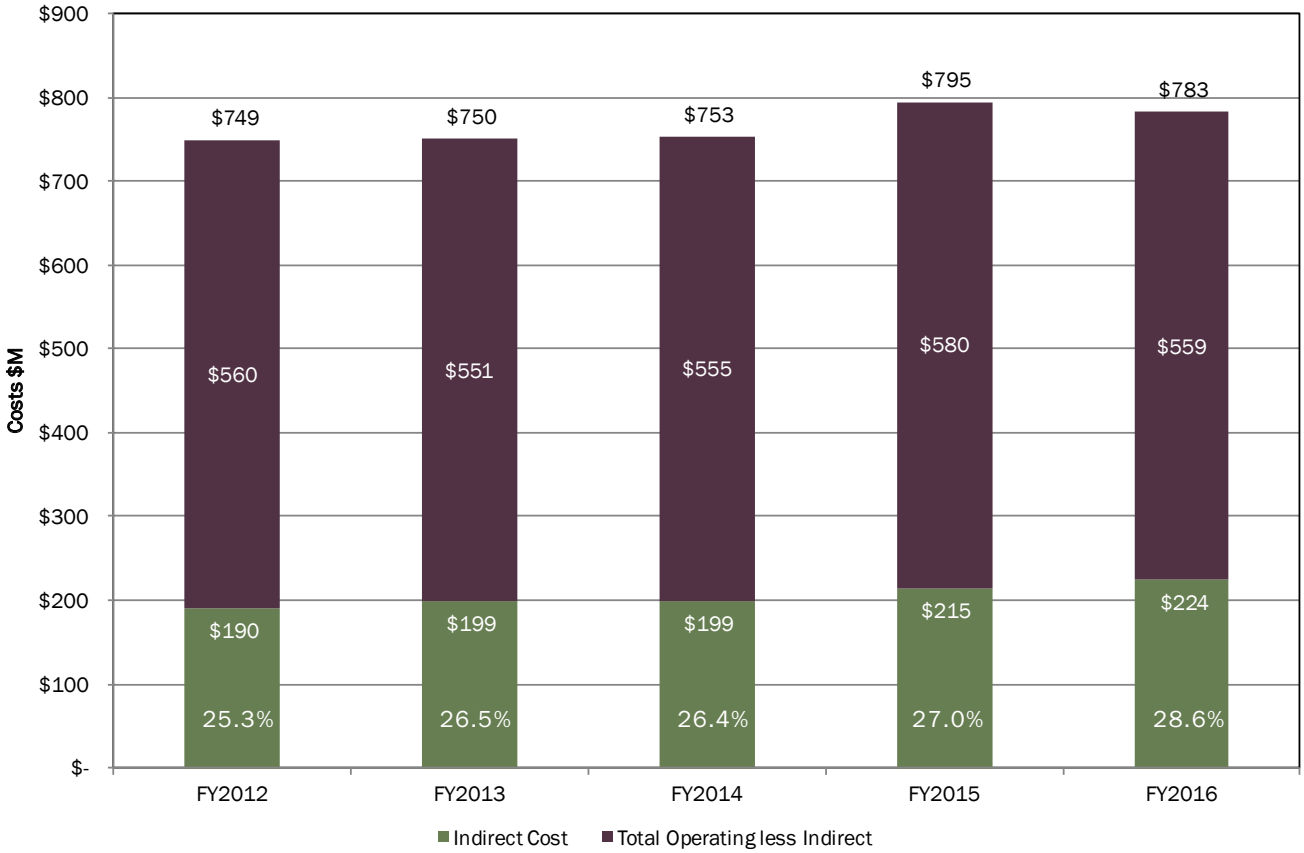


Figure 3.2

Institutional Overhead Costs as a Percent of Operating Costs, FY2012-FY2016



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, FY2016 ($K)

Division	G&A (a)	LDRD (b)	Procurement	Travel	IGPP	Total
Lab Directorate	18,465	-	-	-	-	18,465
LDRD	-	24,546	-	-	-	24,546
Associate Lab Director for Operations						
Chief Operating Officer	1,854	-	-	-	-	1,854
Project Management Office	740		-	-	-	740
Office of Institutional Assurance and Integrity	2,075	-	-	-	-	2,075
Public Affairs	2,981	-	-	-	-	2,981
Human Resources	10,024	-	-	-	-	10,024
Environment, Health & Safety	21,259	-	-	-	-	21,259
Facilities	57,188	-	1,842	-	8,590	67,619
Noncap	7,464	-	-	-	-	7,464
CFO	9,043	-	11,961	1,247	-	22,252
IT Division & BSC	31,670	-	-	-	-	31,670
Protective Services	10,099	-	-	-	-	10,099
Engineering	2,671	-	-	-	-	2,671
Earth Sciences	10	-	-	-	-	10
General Lab	8,147	-	-	-	-	8,147
Total	**183,690**	**24,546**	**13,803**	**1,247**	**8,590**	**231,876**

Note: Minor variances may occur due to rounding.
(a) Includes Site Support & Strategic Planning Support Activities (SPSA).
(b) LDRD costs include $7.4M of G&A assessment.

Table 3.2

Institutional FTEs Charged by Division, FY2016

Division	G&A (a)	LDRD (b)	Procurement	Travel	IGPP	Total
Lab Directorate	73.2	-	-	-	-	73.2
LDRD	-	106.1	-	-	-	106.1
Chief Operating Officer	6.9	-	-	-	-	6.9
Project Management Office	1.5	-	-	-	-	1.5
Office of Institutional Assurance and Integrity	10.5	-	-	-	-	10.5
Public Affairs	15.3	-	-	-	-	15.3
Human Resources	54.7	-	-	-	-	54.7
Environment/Health/Safety	94.0	-	-	-	-	94.0
Facilities	160.6	-	10.5	-	6.2	177.3
Engineering	8.5	-	-	-	-	8.5
Earth Sciences	0.0	-	-	-	-	0.0
CFO	60.1	-	72.8	7.4	-	140.3
IT Division & BSC	89.7	-	-	-	-	89.7
Protective Services	20.6	-	-	-	-	20.6
General Lab	-	-	-	-	-	-
Total	**595.5**	**106.1**	**83.3**	**7.4**	**6.2**	**798.5**

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)

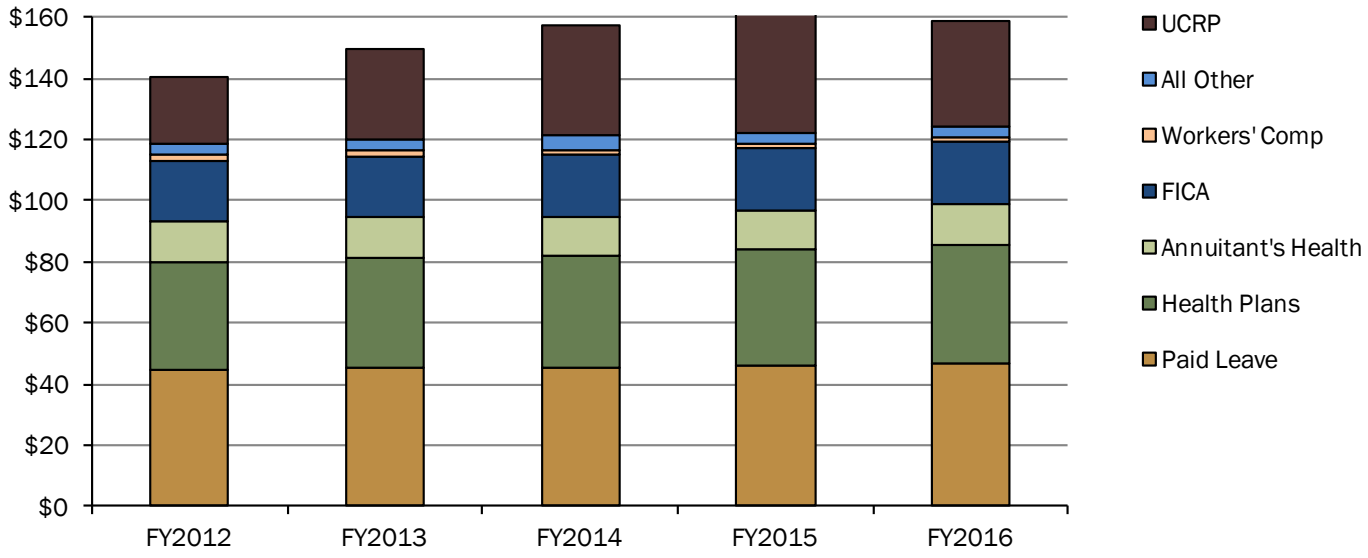


Figure 3.4

Gross Payroll Summary ($M)

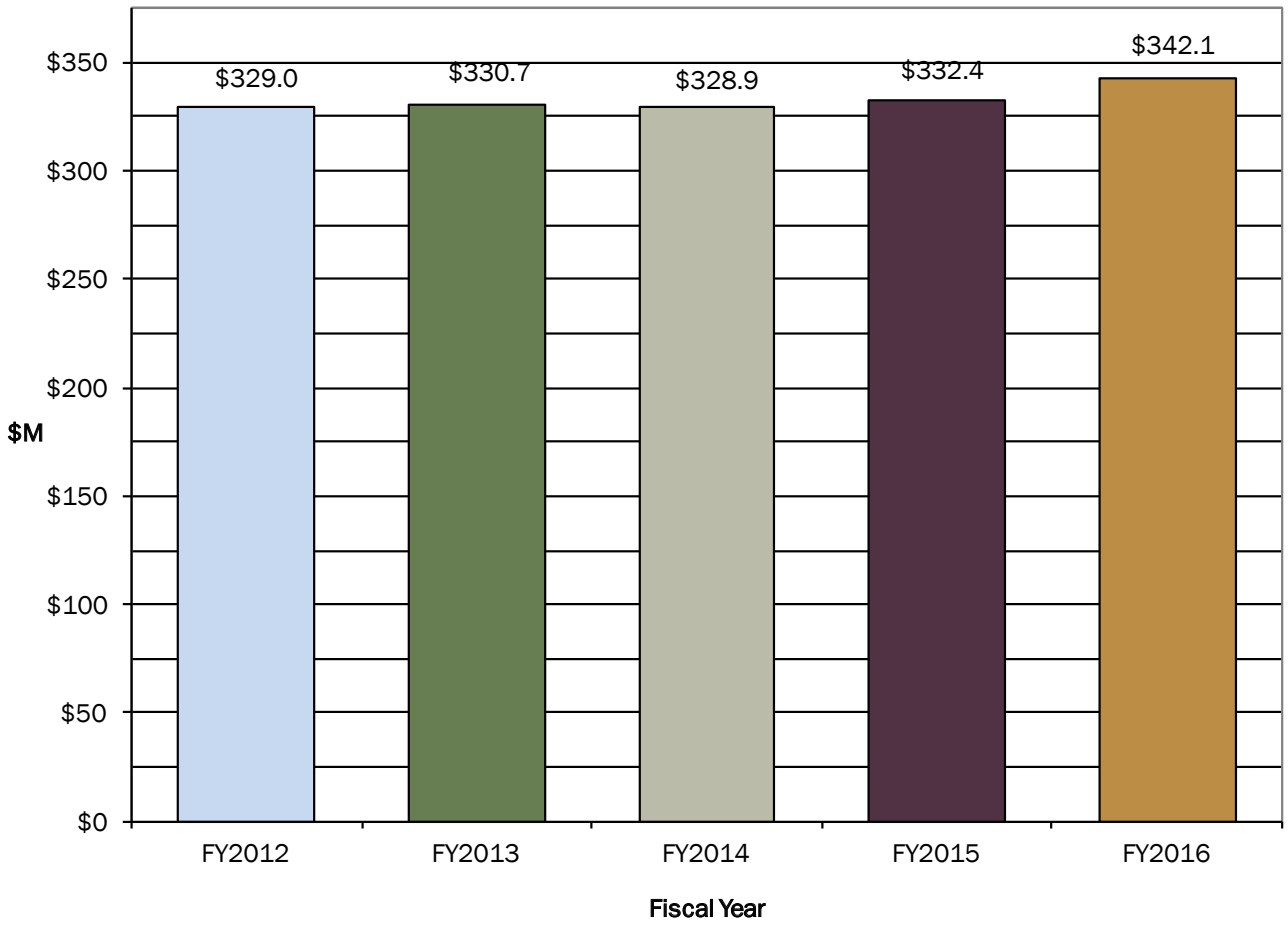


Table 3.3

Organizational Burden Costs and FTEs by Area

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

Area Cost Pools	FY2016	
	Cost $K	Avg FTE
Biosciences	12,301	76.5
Computing Sciences	6,748	36.9
Computational Research	2,345	10.0
National Energy Research Scientific Computing Center	986	7.5
Scientific Networking Division	482	3.9
Energy Sciences	8,756	44.7
Advanced Light Source	2,374	10.7
Chemical Sciences	2,199	14.6
Materials Sciences	3,631	17.0
Energy Technologies Area	8,042	38.7
Physical Sciences	10,628	52.3
Accelerator Technology & Applied Physics	1,662	8.8
Engineering	4,922	21.3
Nuclear Sciences	1,841	10.1
Physics	1,806	10.8
Earth & Environmental Sciences	4,398	22.2
Directorate & Operations	7,697	34.7
Facilities	4,825	22.6
Information Technology	2,872	12.1
Total	**58,570**	**306.0**
Note: Minor Variances may occur due to rounding.		

Area Burden Costs and FTEs

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

Area Cost Pools	FY2016	
	Cost $K	Avg FTE
Biosciences	12,301	76.5
Computing Sciences	2,934	15.5
Energy Sciences	551	2.4
Energy Technologies Area	8,042	38.7
Physical Sciences	396	1.3
Earth & Environmental Sciences	4,398	22.2
Total	**28,623**	**156.6**
Note: Minor Variances may occur due to rounding.		

Table 3.4

Service Center Costs and FTEs by ALD

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).

Division (a)	FY2016	
	Cost $K	Avg FTE
OCFO - Property Storage Recharge	98	0.2
Computing Sciences	3,612	-
Energy Technologies	2,872	14.6
Engineering	1,322	6.1
Earth & Environmental Sciences	112	0.3
Facilities	10,055	2.2
Joint Genome Institute	4,365	1.1
Information Technology	6,946	13.7
Biological Systems & Engineering	735	2.8
Materials Sciences	290	1.0
Molecular Biophysics & Integrated Bioimaging	7,942	11.4
ALD Operations (b)	4,371	4.8
Lab Directorate	571	1.3
Total	**43,291**	**59.5**

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.

Table 3.5

Distributed Recharges by Resource Category Trends, FY2012-FY2016 ($K)

Distributed Recharge (a, b)	FY2012	FY2013	FY2014	FY2015	FY2016
Vehicle	829	759	859	864	875
MSD Facility	331	259	250	272	272
Animal Care	720	665	640	659	657
Creative Services	1,511	1,507	1,233	919	955
FAM Facility Recharge	-	75	104	78	57
ESD Sample Analysis Recharge	-	131	49	69	111
Warehouse Storage Recharge	51	128	100	96	90
88-Inch Accelerator Operations	562	720	511	1,026	1,185
JBEI Non-Material Recharge	869	946	931	1,335	869
JBEI Material Recharge	4,095	4,845	5,162	5,270	5,280
BCSB	-	-	1,325	1,568	1,445
Telephone Services	5,637	5,318	5,406	5,200	5,592
ETA Recharge	2,132	2,149	2,524	2,802	2,687
Computer/Net Recharges	2,258	1,913	1,683	1,584	1,463
Flexlab Recharge	-	-	40	60	204
Engineering Shop	878	884	729	656	606
CAD	717	794	728	731	739
ALS Proprietary Recharge	823	617	576	809	868
JGI Recharge (Capillary Sequencing) (c)	15	-	-	-	-
JGI SPP Administrative Charge (d)	68	-	-	-	-
ESnet Recharge	822	310	294	294	569
Scientific Networking	-	-	-	2,683	3,250
CRT HPC Recharge	-	-	-	1,327	3,612
JGI Occupancy Labor Recharge (d)	948	1,152	1,188	980	132
JGI Occupancy Material Recharge (d)	2,684	-	3,821	4,617	4,231
Electricity	10,795	10,597	12,075	12,919	9,427
Sustainability Recharge	-	-	-	-	580
Mixed Waste Recharge/GL	2	1	-	-	-
National Center for Electron Microscopy	7	3	-	-	-
GSRA - Material Recharge	3,937	3,610	3,231	2,917	3,397
GSRA - Non-Material Recharge	0	7	19	-	-
Low Background Facility	29	48	-	-	-
Total Recharges	**40,722**	**37,437**	**43,477**	**49,735**	**49,154**

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.
(c) JGI Capillary Sequencing platform phased out in FY2012.
(d) JGI SPP Administrative Charge phased out in FY2012 and replaced by JGI Occupancy Labor and Material Recharges.

4. FINANCIAL STATEMENT

Table 4.1

Balance Sheet Comparative Statement of Financial Position ($K)

	FY2016	FY2015
ASSETS:		
Current Assets		
Cash	4,467	5,205
Accounts Receivable	33,754	33,558
Inventories	451	442
Other Current Assets	670	244
Total Current Assets	**39,342**	**39,449**
Net Plant & Equipment	630,067	622,978
TOTAL ASSETS	**669,409**	**662,427**
LIABILITIES AND EQUITY:		
Liabilities:		
Current Liabilities		
Drafts Payable	2,857	1,764
Accounts Payable	38,823	40,145
Accrued Expenses	45,171	72,313
Capital Lease Liability - Current	5,333	6,869
Unearned Revenues	59,835	62,525
Other	330	357
Total Current Liabilities	**152,349**	**183,973**
Environmental Liabilities	413,313	699,944
ES&H Liability	361,269	345,436
Capital Lease Liability - Noncurrent	12,252	203
Post-Retirement Benefits (Note 2)	686,063	674,616
Pension Plan Liability (Note 2)	1,404,837	1,097,336
TOTAL LIABILITIES	**3,030,083**	**3,001,508**
DOE EQUITY:		
Beginning Equity	(2,339,081)	(2,001,090)
Change in Equity (Note 2)	(21,593)	(337,991)
Ending Equity	(2,360,674)	(2,339,081)
TOTAL LIABILITIES AND EQUITY	**669,409**	**662,427**

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.

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, royalty, and gift.

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 interlocation 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.

Note 1: Summary of Significant Accounting Policies Continued

Prepayments

The Laboratory accounts for prepayments as balance sheet assets if the amortization of costs will occur over a period exceeding 12 months and amortization is deemed material.

Property, Plant, and Equipment

Property, 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. Property, 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, 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 environmental liabilities for future clean up and 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: FY2016 Year-End Adjustments

DOE made adjustments to record FY2016 Post-Retirement Benefit and Pension Plan obligation. These amounts will be reflected In the Laboratory's actuals for October 2016. These adjustments are the result of coordination and approval by both DOE and UC.

The following is the adjusted balance sheet for FY2016:

Adjusted Balance Sheet ($K)			
	FY2016	**YE Adjustments**	**Adjusted FY2016**
ASSETS:			
Current Assets			
Cash	4,467	-	4,467
Accounts Receivable	33,754	-	33,754
Inventories	451	-	451
Other Current Assets	670	-	670
Total Current Assets	**39,342**	**-**	**39,342**
Net Plant & Equipment	630,067	-	630,067
TOTAL ASSETS	**669,409**	**-**	**669,409**
LIABILITIES AND EQUITY:			
Liabilities:			
Current Liabilities			
Drafts Payable	2,857	-	2,857
Accounts Payable	38,823	-	38,823
Accrued Expenses	45,171	-	45,171
Capital Lease Liability-Current	5,333	-	5,333
Unearned Revenues	59,835	-	59,835
Other	330	-	330
Total Current Liabilities	**152,349**	**-**	**152,349**
Environmental Liabilities	413,313	-	413,313
ES&H Liability	361,269	-	361,269
Capital Lease Liability	12,252	-	12,252
Post-Retirement Benefits	674,616	11,447	686,063
Pension Plan Liability	1,097,335	307,502	1,404,837
TOTAL LIABILITIES	**2,711,134**	**318,949**	**3,030,083**
DOE Equity:			
Beginning Equity	(2,339,081)	-	(2,339,081)
Change in Equity	297,356	(318,949)	(21,593)
Ending Equity	(2,041,725)	(318,949)	(2,360,674)
TOTAL LIABILITIES AND EQUITY	**669,409**	**0**	**669,409**

Note 2: FY2015 Year-End Adjustments

The following is the adjusted balance sheet for FY2015:

Adjusted Balance Sheet ($K)			
	FY2015	**YE Adjustments**	**Adjusted FY2015**
ASSETS:			
Current Assets			
Cash	5,205	-	5,205
Accounts Receivable	33,558	-	33,558
Inventories	442	-	442
Other Current Assets	244	-	244
Total Current Assets	**39,449**	**-**	**39,449**
Net Plant & Equipment	622,978	-	622,978
TOTAL ASSETS	**662,427**	**-**	**662,427**
LIABILITIES AND EQUITY:			
Liabilities:			
Current Liabilities			
Drafts Payable	1,764	-	1,764
Accounts Payable	40,145	-	40,145
Accrued Expenses	72,313	-	72,313
Capital Lease Liability-Current	6,869	-	6,869
Unearned Revenues	62,525	-	62,525
Other	357	-	357
Total Current Liabilities	**183,973**	**-**	**183,973**
Environmental Liabilities	699,944	-	699,944
ES&H Liability	345,436	-	345,436
Capital Lease Liability	203	-	203
Post-Retirement Benefits	597,938	76,678	674,616
Pension Plan Liability	949,463	147,873	1,097,336
TOTAL LIABILITIES	**224,551**	**3,001,508**	**224,551**
DOE Equity:			
Beginning Equity	(2,001,090)		(2,001,090)
Change in Equity	(113,440)	(224,551)	(337,991)
Ending Equity	(2,114,530)	(224,551)	(2,339,081)
TOTAL LIABILITIES AND EQUITY	**662,427**	**0**	**662,427**

5. PROCUREMENT & PROPERTY MANAGEMENT

Table 5.1

Purchases Placed Using Purchase Orders/Subcontracts

Total POs	($K)	# Actions
$0 - $25,000	$59,085	60,528
$25,001 - $150,000	$82,161	1,380
$150,001- $1,000,000	$99,514	304
$1,000,001 +	$113,521	46

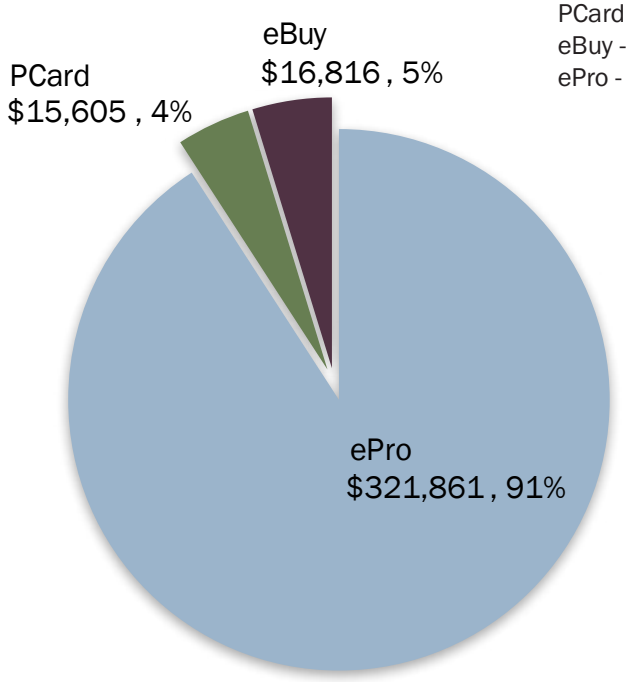
Table 5.2

Procurement Purchase Order Dollar Amount by Area

Area	PO ($K)
Directorate & Operations	$119,491
Biosciences	$61,174
Physical Sciences	$55,874
Energy Technologies	$40,790
Computing Sciences	$34,024
Energy Sciences	$25,206
Earth & Environmental Sciences	$17,721
Total	**$354,281**

Figure 5.1

Procurement Spend 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

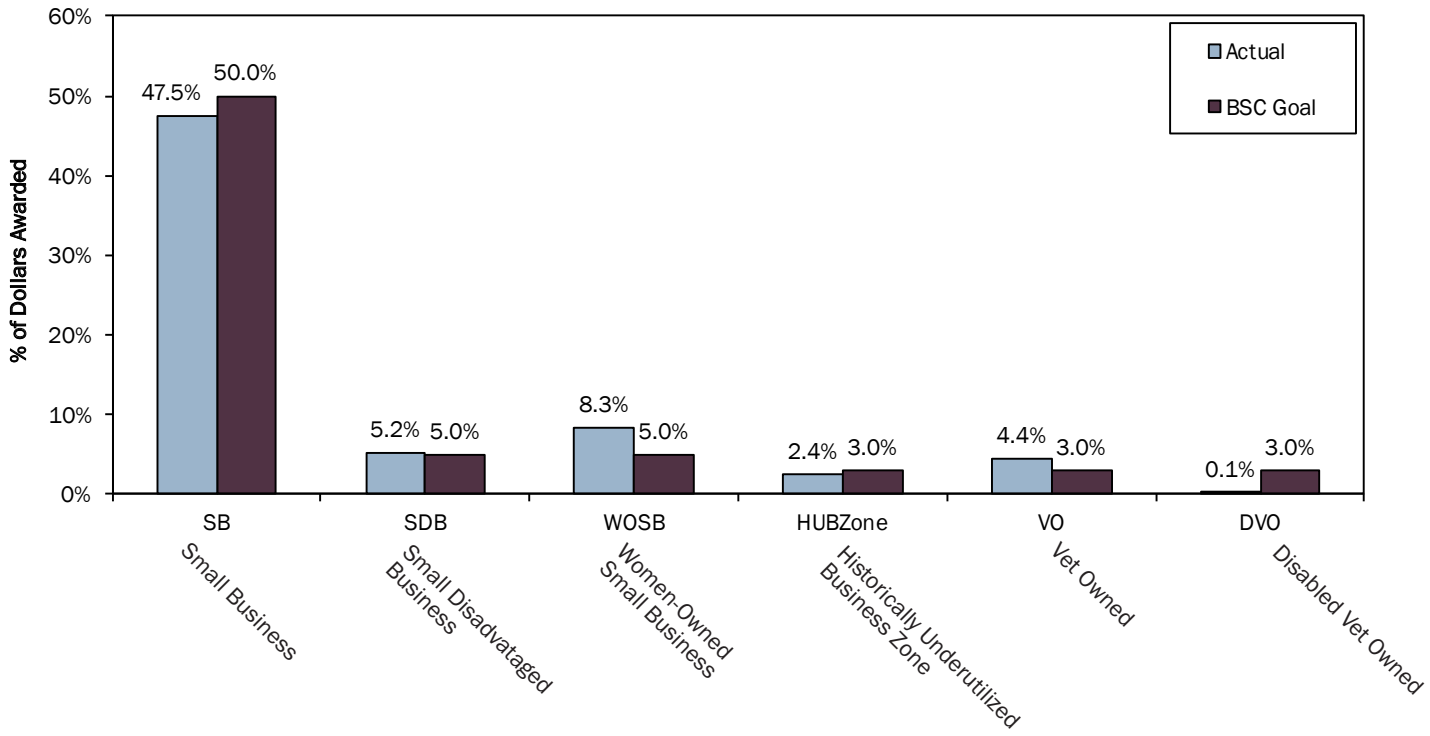


Figure 5.3

Cycle Time for Purchase Orders ≤$25K — Subcontracting Groups FY2016

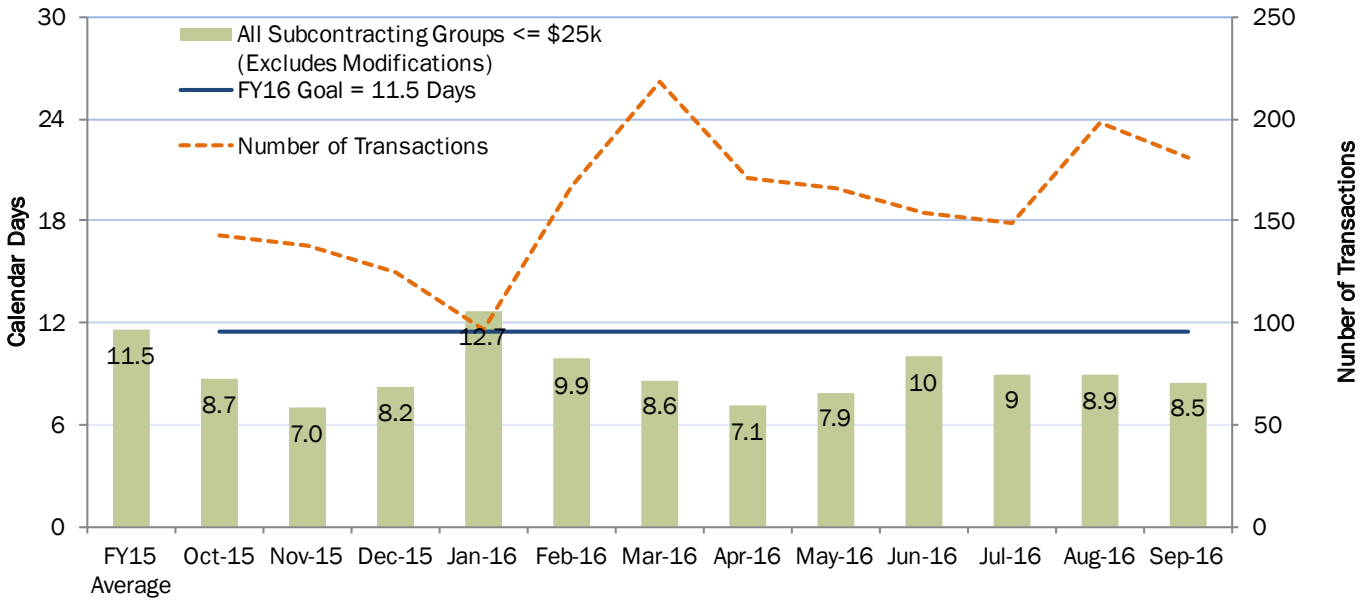


Figure 5.4

Procurement Cost Savings

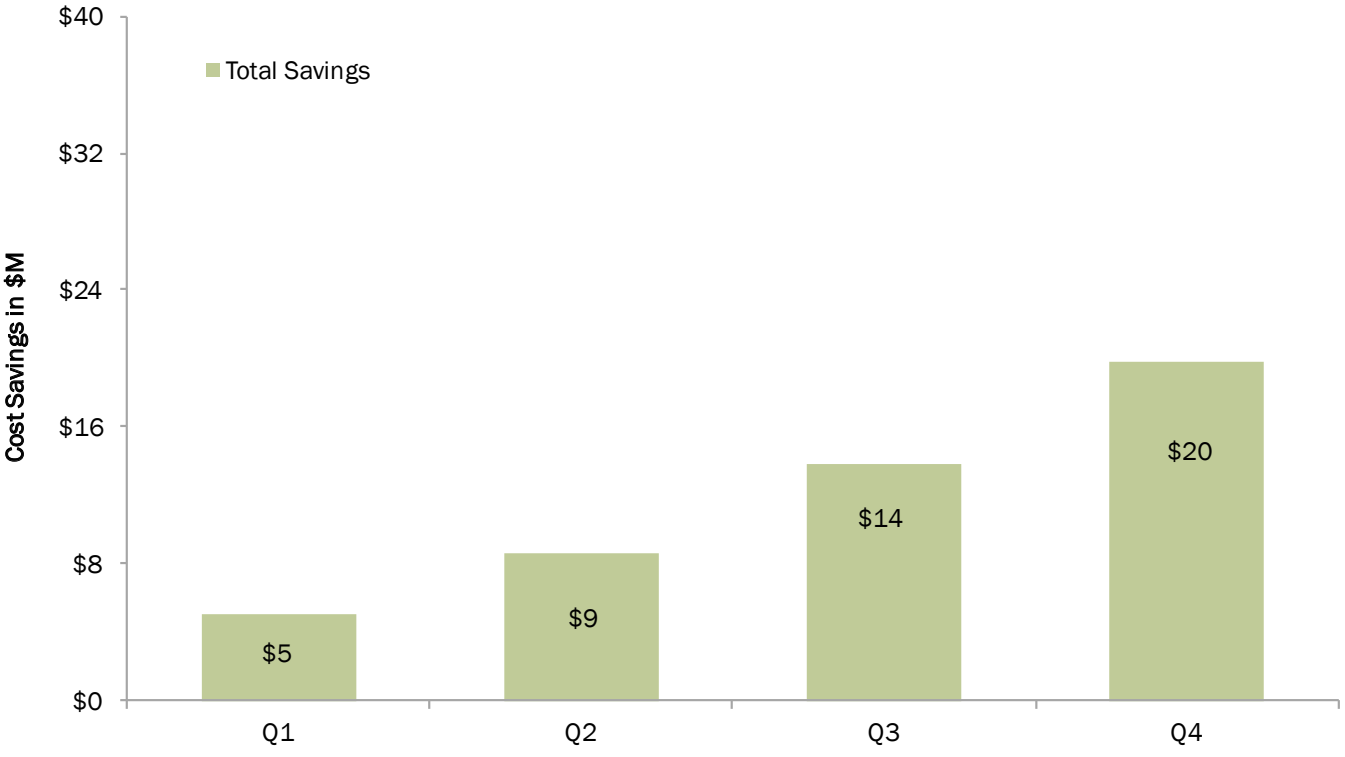


Table 5.3

Property Management Activity

	# of Assets	Acquisition Value ($K)	
Equipment (a)	7,071	690,437	
Attractive (b)	18,865	78,199	
High Risk (c)	20	209,359	
TOTAL ASSETS	**25,956**	**977,995**	
Computers Laptops	6,641	12,288	
Computer Desktops	6,083	11,436	
Tablets	1,147	748	
Total	**13,871**	**24,472**	
Inventory campaign	**Base**	**Positive Resolutions**	**% Positive**
Attractive	2,148	2,118	98.60%
Controlled	1,214	1,207	99.42%
High Risk	18	18	100%
Final Results	3,380	3,343	98.91%
Validation Size	154	154	100%
Assets Scanned	2,994	3,343	89.56%
Division	**Asset Count**	**Acquisiton Value ($K)**	
BIOSCIENCES			
Biological Systems & Engineering	1,371	25,056	
Bioscience Area Office	1,141	30,344	
Environmental Genomics & System Biology	328	3,568	
Joint Genome Institute	1,004	23,437	
Molecular Biophysics & Integrated Bioimaging	637	14,116	
COMPUTING SCIENCES			
Computational Research	935	2,841	
Computing Sciences ALD	56	91	
National Energy Research Scientific Computing Center	1,281	82,664	
Scientific Networking	762	26,016	

(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...

Table 5.3 Continued

Property Management Activity Continued

Division	Asset Count	Acquisiton Value ($K)	
DIRECTORATE & OPERATIONS			
Chief Financial Officer	270	417	
Environment, Health, Safety & Security	304	2,131	
Excess	257	2,446	
Facilities	613	5,986	
Human Resources	139	172	
Information Technology	2,759	24,955	
Laboratory Directorate	124	309	
Operations	28	38	
Other			
Protective Services	630	3,051	
Public Affairs	105	208	
EARTH & ENVIRONMENTAL SCIENCES			
Climate & Ecosystems	596	8,664	
Earth & Environmental Science ALD	394	2,021	
Energy Geosciences	706	11,122	
ENERGY SCIENCES			
Advanced Light Source	1,598	228,343	
Chemical Sciences	1,230	38,139	
Energy Sciences ALD			
Material Sciences	3,044	138,092	
ENERGY TECHNOLOGIES			
Bldg Tech Urban Systems	527	5,375	
Cyclotron Road	47	340	
Energy Analysis Environmental Impact	563	4,265	
Energy Storage & Distributed Resources	729	13,452	
ETA Area Office	228	782	
PHYSICAL SCIENCES			
Accel Tech & App Physics	1,020	96,774	
Engineering	876	13,452	
Nuclear Science	786	67,312	
Physics	868	102,016	
TOTAL	**25,956**	**977,995**	

6. ACRONYMNS & KEY TERMS

Acronyms and Key Terms

ALD	Associate Lab Director
ALS	Advanced Light Source
ANL	Argonne National Laboratory
ARPA-E	Advanced Research Projects Agency-Energy
ARRA	American Recovery and Reinvestment Act of 2009
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 (Oct. 1 through Sept. 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 Contractors
ICO	Integrated Contractor Order
IGPP	Institutional General Plant Projects
IJE	Inter-Juristictional Employee Exchange
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
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
OSPIP	Office of Sponsored Projects and Industry Partnerships
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	Site Support & 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.