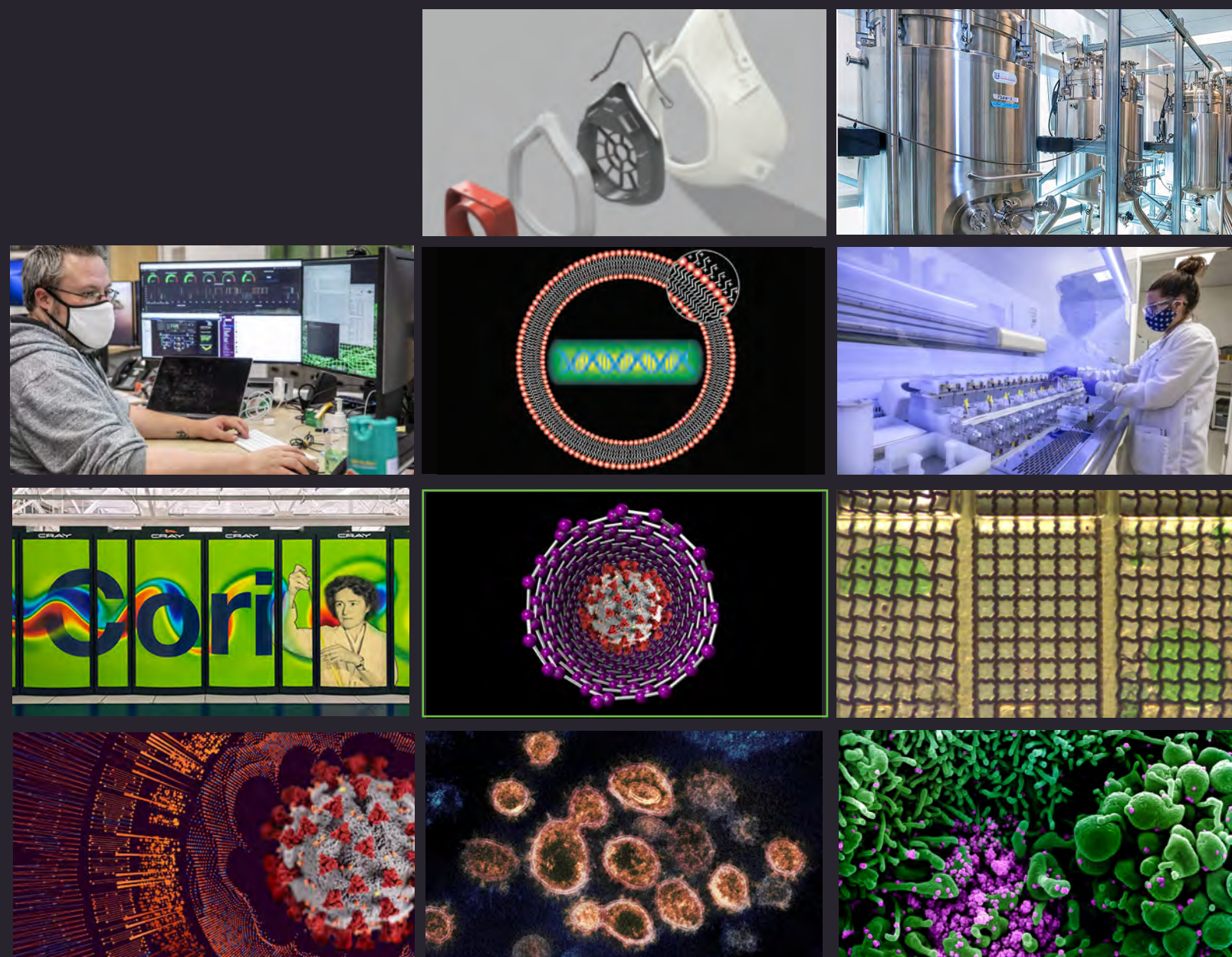




BERKELEY LAB

2020 Annual Financial Report



Front Cover Image Captions:

FLEXLAB(R), the world's most advanced building simulator and testbed, will be used to simulate office and school heating, ventilation, and air conditioning configurations. (Credit: Marilyn Sargent/Berkeley Lab)	UC Berkeley's Jason Duckering wearing a prototype of a rechargeable anti-COVID mask design. (Credit: UC Berkeley)	Advanced Biofuels and Bioproducts Process Development Unit (ABPDU) (Credit: Roy Kaltschmidt/Berkeley Lab)
Basil Lalli works alone in the control room at NERSC during first week of Return to Work Pilot 1 at Lawrence Berkeley National Laboratory on Wednesday, June 3, 2020 in Berkeley, Calif. (Credit: Marilyn Sargent/Berkeley Lab)	Lipitoids, which self-assemble with DNA and RNA, can serve as cellular delivery systems for antiviral therapies that could prevent COVID-19 and other coronavirus infections. (Illustration courtesy of R.N. Zuckermann)	Laura Fernandez works on the 250 mL automated, high throughput bioreactor platform as part of the Caspr Biotech project at the ABPDU. (Credit: Marilyn Sargent/Berkeley Lab)
NERSC's Cori Supercomputer. NERSC is contributing resources to the federal COVID-19 High Performance Computing Consortium. (Credit: Roy Kaltschmidt/Berkeley Lab)	Artist's rendition of a carbon nanotube COVID-19 detector. (Courtesy of: Zettl Research Group/Berkeley Lab)	A patterned surface of microelectrodes used to control the position, rate and mixing of droplets on the microfluidic device. (Credit: Jess Sustarich, Sandia National Laboratories, Livermore, CA.)
Concept of SARS-CoV-2 (Credit: CDC and Garry Killian/Shutterstock)	This transmission electron microscope image shows SARS-CoV-2 – the virus that causes COVID-19 – isolated from a patient in the U.S. The protrusions visible on the outside are the spike proteins that the virus particles use to fuse with and gain entry to host cells. (Credit: NIAID)	This colorized scanning electron micrograph shows an apoptotic cell (green) heavily infected with SARS-COV-2 virus particles (purple), the cause of COVID-19. NERSC's scientific computing resources are joining the fight to understand, control, and prevent the virus spread. (This image was captured and color-enhanced at the NIAID Integrated Research Facility in Fort Detrick, Maryland. Credit: National Institute of Allergy and Infectious Diseases, NIH)



BERKELEY LAB Annual Financial Report

2020



Ernest Orlando Lawrence Berkeley National Laboratory
University of California • Berkeley, California • January 2021

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In 2021, Lawrence Berkeley National Laboratory is celebrating its 90th year. The Lab was founded in 1931 on the idea that science could discover solutions to some of humankind's most pressing problems by working together.

That dedication continues today. The Lab continues as an internationally renowned research institution dedicated to addressing the world's most challenging scientific problems, from advancing sustainable energy solutions and creating useful new materials, to pushing the frontiers of computing and revealing the origin and fate of the universe.

Berkeley Lab's scientific expertise has been recognized with 14 Nobel Prizes. The University of California manages the Lab on behalf of the U.S. Department of Energy (DOE).



FY2020 financial results highlight another year of robust funding – \$1.2B, a slight increase over FY2019 – for the Lab under the steady and focused leadership of Laboratory Director Michael Witherell and Deputy Lab Directors Horst Simon, Research, and Michael Brandt, Operations. The DOE continues to demonstrate its trust in the Lab to carry out its scientific mission through its continued investment in large-scale initiatives. In an extraordinary year of challenge, the Lab achieved many noteworthy firsts:

- This is the first year the Lab has executed \$1B worth of research work while operating a national lab under global pandemic conditions.
- Although the Lab is no stranger to recognizing its Nobel laureates, the Lab's 14th Nobel laureate, Jennifer Doudna, was the first individual woman from the Lab to
- grams and useful technologies. The scientific return on that modest investment has already been great.
- The Lab was selected as lead lab for the Cosmic Microwave Background (CMB) Stage 4 project, which will be the first experiment to access the entire scope of ground-based CMB science. It will be the largest collaborative undertaking yet to explore the infant universe's relic light. CMB-S4 detectors will be placed on 21 telescopes in two of our planet's prime places for viewing deep space: the South Pole and the high Atacama desert in Chile.
- To ensure power resilience in an era of Public Safety Power Shutoffs, the Lab tested temporary power generating capabilities that provided electricity to about one-third of all the Lab buildings. This will enable the continuity of critical research activities and avoid complete closure of the site in the event of a public utility shutoff of power.
- Established the ninth Employee Resource Group, Asian and Pacific Islander, as part of our focus on the Lab's

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

be honored. In 2008, Doudna's then nascent research on CRISPR RNA strands and the Cas1 protein was funded by the DOE Laboratory Directed Research and Development (LDRD) program through Berkeley Lab. In collaboration with colleagues in Berkeley and around the world, this fundamental work grew into a precise gene-editing tool with many potential health, energy, and environmental applications. It was another example of the many high risk, high payoff research ideas advanced through the LDRD program that has grown into major research pro-

Inclusion, Diversity, Equity and Accountability (IDEA) program. The employee resource groups are open to all employees and provide an additional opportunity to nurture and grow our employees. The other groups include African American, All Access, Early Career, gLoBaL, Lambda Alliance, Latin American and Native American, Veterans, and Women Scientists and Engineers.

In addition to the events above, when the global pandemic was declared last March, and the State executed its "shelter in

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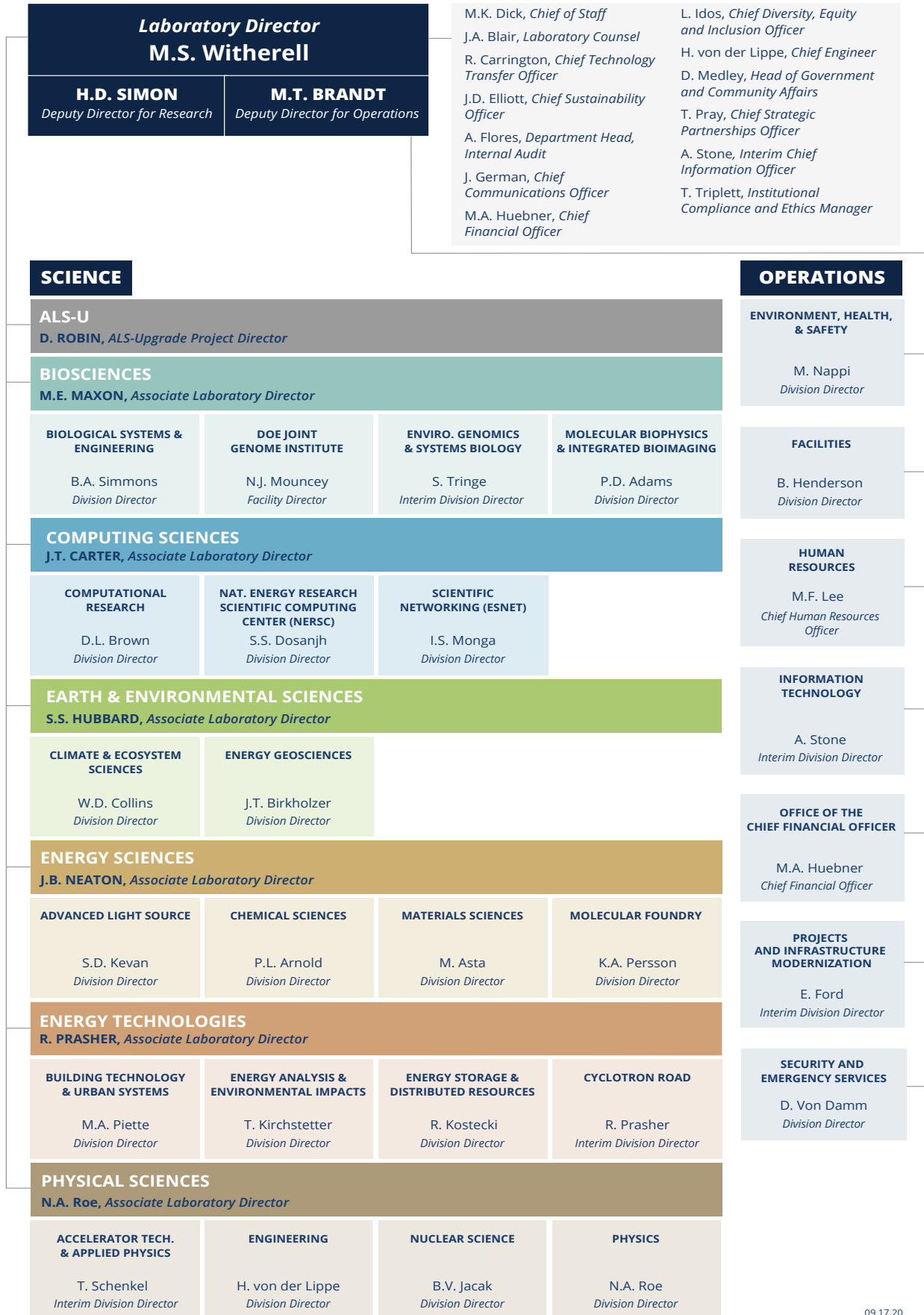
place" order, the Lab developed a comprehensive program designed to keep its employees safe when they were able to come to work at Lab locations. A team of scientific and operations staff helped identify the essential workers needed to maintain the lab on safe and stable standby, and then worked out a system to gradually increase more workers onsite in response to local case and hospitalization rates. While many employees continued to telework full time, the Lab was able to bring nearly half its staff back to Lab locations over a six month period.

To say this was an unusual year would be an understatement. What stood out to me was the resilience and commitment that the Lab community demonstrated

in responding to challenging external events such as the threat of power shutoffs, the stay-at-home health orders as part of the COVID-19 pandemic, and national social and political discord. The Lab's ability to operate under these unique circumstances was made possible by all of our collective efforts. Operations and scientific divisions supported each other in establishing new safety controls, developing new policies to support the required telework environment, and implementing a variety of new guidance, laws, and requirements in order to enable the execution of the research mission. I am extremely proud of not just the OCFO team, but the entire Lab community's dedication and resilience in the face of prolonged adversity. We are getting through this together.

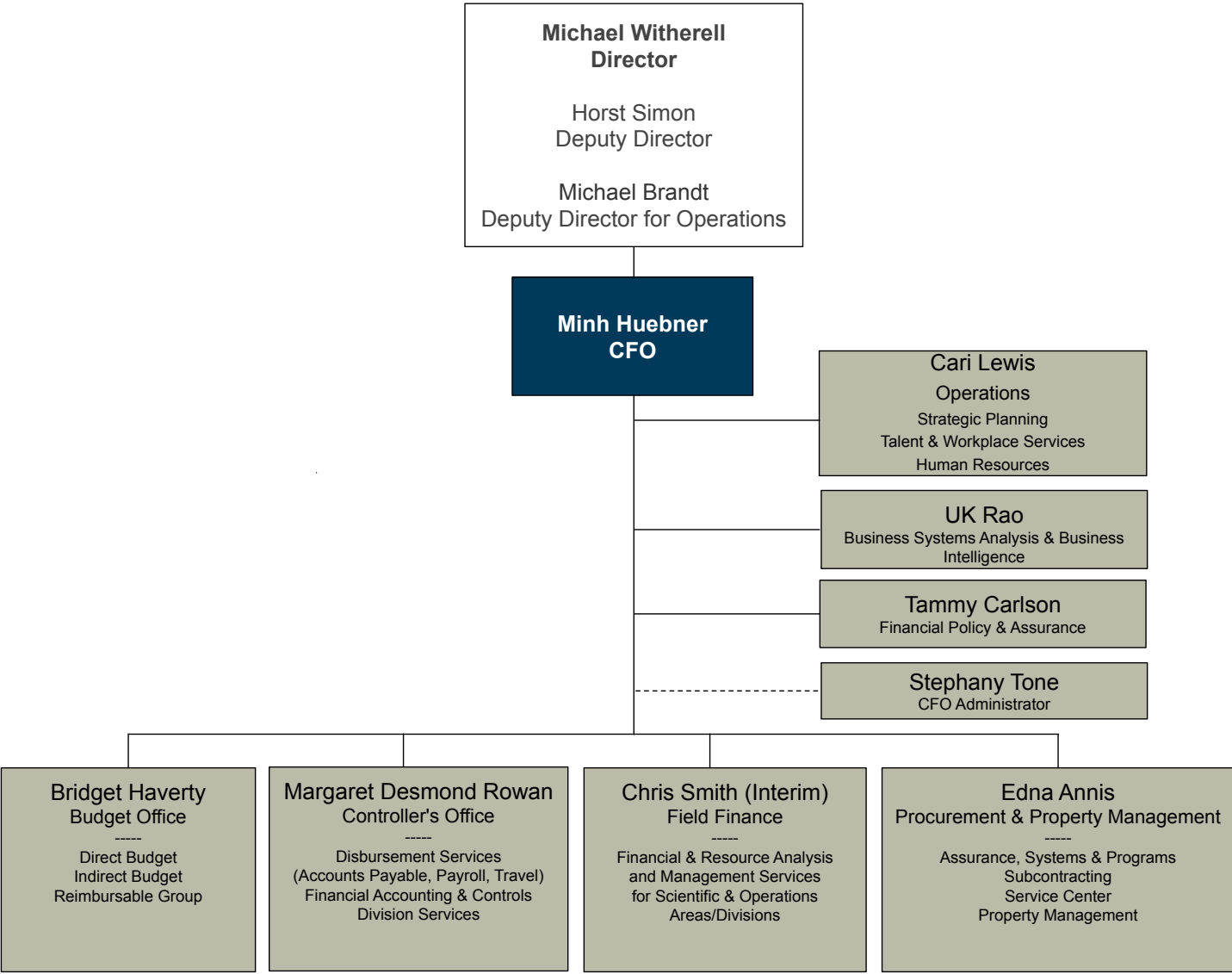
Minh Agon Huebner
Chief Financial Officer

Lawrence Berkeley National Laboratory (LBNL), University of California



09.17.20

Office of the Chief Financial Officer



INSTITUTIONAL INFORMATION

1

Where Did Your Program Dollars Go in FY2020?

Expenses	DOE Operating Costs	DOE Integrated Contractors Costs	Construction and Equipment	SPP Non-DOE
DIRECT				
Direct Labor				
UC Labor (a)	\$0.34	\$0.43	\$0.31	\$0.37
Contract Labor	\$0.00	\$0.00	\$0.01	\$0.00
Organization/Area Burden	\$0.05	\$0.06	\$0.04	\$0.06
Subtotal Direct Labor	\$0.40	\$0.49	\$0.35	\$0.43
Other Direct				
Services	\$0.20	\$0.13	\$0.25	\$0.12
Materials	\$0.09	\$0.03	\$0.28	\$0.06
Utilities	\$0.01	\$0.00	\$0.00	\$0.00
Other Expenses (b)	\$0.01	\$0.00	\$0.00	\$0.01
Recharges (c)	\$0.02	\$0.05	\$0.01	\$0.05
Travel	\$0.01	\$0.01	\$0.00	\$0.01
Subtotal Other Direct	\$0.33	\$0.22	\$0.55	\$0.25
Total Direct	\$0.73	\$0.71	\$0.90	\$0.68
INDIRECT				
Procurement	\$0.01	\$0.01	\$0.02	\$0.01
Travel	\$0.00	\$0.00	\$0.00	\$0.00
G&A (Other Inst.)	\$0.26	\$0.28	\$0.08	\$0.31
Total Indirect	\$0.27	\$0.29	\$0.10	\$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, Administrators, Students/GSRAs and Campus Labor. (b) Includes misc. expenses (stipends, sales tax, freight, etc.). (c) Distributed activities used by direct funded programs. Includes recharges credited back to direct operating accounts such as ALS and ESnet.				

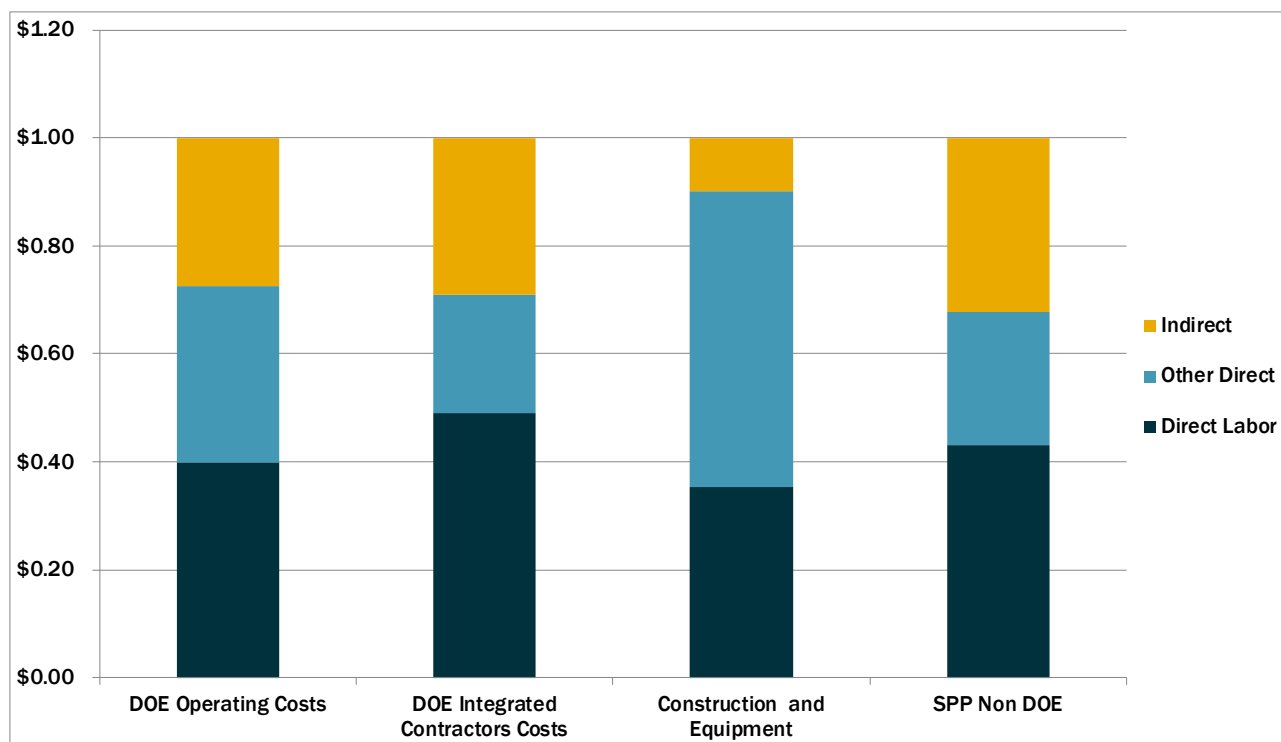


Table 1.1

Cost Trends by Expense Category, FY2016-FY2020 (\$M and % of Total)

Expenses	FY 2016		FY 2017		FY 2018		FY 2019		FY 2020	
	\$M	%	\$M	%	\$M	%	\$M	%	\$M	%
DIRECT										
Direct Labor										
UC Labor (a)	275.1	33.3%	283.1	33.0%	289.2	31.9%	315.0	33.3%	347.1	34.7%
Contract Labor	1.3	0.2%	1.0	0.1%	0.8	0.1%	1.4	0.1%	1.3	0.1%
Organization/ALD Burden	47.5	5.7%	48.2	5.6%	47.7	5.3%	50.9	5.4%	54.0	5.4%
Subtotal Direct Labor	323.9	39.2%	332.3	38.7%	337.7	37.2%	367.3	38.8%	402.4	40.2%
OTHER DIRECT										
Services	158.1	19.1%	174.3	20.3%	217.6	24.0%	200.6	21.2%	192.9	19.3%
Materials	77.9	9.4%	77.2	9.0%	74.5	8.2%	83.4	8.8%	101.6	10.2%
Utilities	6.9	0.8%	6.8	0.8%	7.6	0.8%	7.3	0.8%	5.7	0.6%
Other Expenses (b)	5.6	0.7%	5.5	0.6%	6.3	0.7%	8.1	0.9%	7.0	0.7%
Recharges (c)	23.3	2.8%	22.4	2.6%	23.4	2.6%	27.2	2.9%	23.5	2.3%
Travel	12.7	1.5%	11.9	1.4%	12.4	1.4%	13.8	1.5%	6.2	0.6%
Subtotal Other Direct	284.6	34.4%	298.1	34.7%	341.6	37.7%	340.3	36.0%	336.9	33.7%
Total Direct	608.5	73.6%	630.4	73.5%	679.3	74.9%	707.6	74.8%	739.3	73.8%
INDIRECT										
Procurement	9.6	1.2%	9.6	1.1%	9.6	1.1%	10.7	1.1%	13.0	1.3%
Travel	1.0	0.1%	1.1	0.1%	1.1	0.1%	1.1	0.1%	0.6	0.1%
G&A (Other Inst.)	207.8	25.1%	217.0	25.3%	217.1	23.9%	226.4	23.9%	248.3	24.8%
Total Indirect	218.4	26.4%	227.7	26.5%	227.9	25.1%	238.2	25.2%	261.9	26.2%
TOTAL EXPENSES	826.9	100.0%	858.1	100.0%	907.2	100.0%	945.8	100.0%	1,001.3	100.0%
Note: Minor variances may occur due to rounding. (a) UC Labor includes salary and benefits for Scientists/Engineers, Administrators, Students/GSRA's and Campus Labor. (b) Includes misc. expenses (stipends, sales tax, freight, etc.) (c) Distributed activities used by direct funded programs. Includes recharges credited back to direct operating accounts such as ALS and ESnet.										

Direct Cost Trends by Area and Division, FY2016 - FY2020 (\$K)

Division	FY2016	FY2017	FY2018	FY2019	FY2020
Biosciences	169,850	170,286	162,458	175,991	182,202
Biological Systems & Engineering	45,702	43,767	38,719	46,520	46,584
Environmental Genomics & System Biology	17,744	15,834	16,894	19,111	21,999
Joint Genome Institute	68,915	71,642	65,904	68,210	75,972
Molecular Biophysics & Integrated Bioimaging	37,489	39,043	40,941	42,150	37,648
Computing Sciences	158,354	172,732	183,308	183,225	227,959
Computational Research	35,563	37,666	43,796	47,646	55,569
National Energy Research Scientific Computing Center	80,041	95,180	99,264	87,495	99,202
Scientific Networking	42,749	39,886	40,248	48,084	73,188
Directorate & Operations (a) (b) (c) (d)	23,135	42,947	74,699	73,070	78,106
Environment, Health, and Safety	31	29	69	282	47
Facilities (a)	14,098	33,231	69,834	4,425	
Human Resources			777	923	988
Information Technology	3,128	4,200	3,891	3,790	4,432
Laboratory Directorate	316	219	92	196	137
Office of the CFO (b)	123	162	37	43	70
Public Affairs	1,520	1,459			
Projects and Infrastructure Modernization (c)				39,480	31,937
Security and Emergency Services (d)	3,919	3,648			3,868
ALS-U				23,931	36,627
Earth & Environmental Sciences	65,537	65,432	66,794	71,703	75,859
Climate & Ecosystems	36,519	36,659	35,345	38,066	41,445
Energy Geosciences	29,019	28,774	31,449	33,636	34,415
Energy Sciences (e)	163,012	164,136	172,134	179,235	175,076
Advanced Light Source	65,578	73,900	79,054	70,281	69,534
Chemical Sciences	28,478	26,702	25,985	27,764	27,194
Material Sciences	68,955	31,553	33,346	42,289	41,636
Molecular Foundry		31,981	33,750	38,901	36,712

Note: Minor variances may occur due to rounding.

(a) Directorate & Operations reorganized in FY2018, Protective Services moved into Facilities.

(b) Office of the CFO includes Inter-Entity Work Orders (IEWO) for the Bay Area Site Office (BASO).

(c) Directorate & Operations reorganized in FY2019, Projects and Infrastructure Modernization was created and moved out of Facilities.

(d) Directorate & Operations reorganized in FY2020, Security and Emergency Services was created (formerly Protective Services) and moved out of Facilities.

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

continued

Direct Cost Trends by Area and Division, FY2016 - FY2020 (\$K)

Division	FY2016	FY2017	FY2018	FY2019	FY2020
Energy Technologies	107,666	113,137	110,305	122,252	124,626
ETA Area Office					140
Building Technologies & Urban Systems	33,893	38,218	34,223	40,242	42,963
Cyclotron Road	1,739	2,937	2,629	3,059	1,343
Energy Analysis & Environmental Impacts	42,576	40,649	42,270	44,221	47,030
Energy Storage & Distributed Resources	29,458	31,333	31,183	34,730	33,150
Physical Sciences	139,346	129,444	137,486	140,305	137,425
Accelerator Technology & Applied Physics	38,772	43,590	42,353	38,566	41,522
Engineering	2,223	1,375	2,153	1,764	3,455
Nuclear Science	33,681	32,130	32,565	37,437	38,464
Physics	64,669	52,349	60,416	62,537	53,984
DIVISION TOTAL	826,899	858,115	907,185	945,781	1,001,254
Note: Minor variances may occur due to rounding.					

Costs by Direct Funding Source by Area and Division, FY2020 (\$K)

Division	FY2020						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal	Operating Subtotal	Capital and Equipment	Total
Biosciences	140,740	2,065	24,805	13,864	181,473	729	182,202
Biological Systems & Energy	34,106	1,094	6,807	4,576	46,584	-	46,584
Environmental Genomics & System Biology	14,169	119	4,895	2,816	21,999	-	21,999
Joint Genome Institute	75,167	-	-	76	75,243	729	75,972
Molecular Biophysics & Integrated Bioimaging	17,298	851	13,103	6,396	37,648	(0)	37,648
Computing Sciences	190,473	22,920	4,476	2,181	220,050	7,909	227,959
Computational Research	32,955	17,095	4,454	1,065	55,569	-	55,569
National Energy Research Scientific Computing Center	87,478	3,335	-	480	91,293	7,909	99,202
Scientific Networking	70,040	2,489	22	637	73,188	-	73,188
Directorate & Operations (a)	23,279	168	4	-	23,451	54,655	78,106
Environment, Health, and Safety	47	-	-	-	47	-	47
Facilities	-	-	-	-	-	-	-
Human Resources	988	-	-	-	988	-	988
Information Technology	4,365	68	-	-	4,432	-	4,432
Laboratory Directorate	108	25	4	-	137	-	137
Office of the CFO (b)	-	70	-	-	70	-	70
Projects and Infrastructure Modernization	13,902	-	-	-	13,902	18,035	31,937
Public Affairs	-	-	-	-	-	-	-
Security and Emergency Services	3,868	-	-	-	3,868	-	3,868
ALS-U	1	6	-	-	7	36,620	36,627
Earth & Environmental Sciences	61,275	6,252	677	7,656	75,859	0	75,859
Climate & Ecosystems	36,330	3,219	676	1,220	41,445	-	41,445
Energy Geosciences	24,945	3,033	1	6,436	34,415	0	

Note: Minor variances may occur due to rounding.
 (a) Directorate & Operations reorganized in FY2020, Security and Emergency Services was created (formerly Protective Services) and moved out of Facilities.
 (b) Office of the CFO includes Inter-Entity Work Orders (IEWO) for the Bay Area Site Office (BASO).

continued

Costs by Direct Funding Source by Area and Division, FY2020 (\$K)

Division	FY2020						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federals	Operating Subtotal	Capital and Equipment	Total
Energy Sciences	151,543	507	1,878	12,477	166,406	8,670	175,076
Advanced Light Source	62,125	31	-	1,023	63,178	6,356	69,534
Chemical Sciences	26,697	326	45	126	27,195	(1)	27,194
Materials Sciences	31,631	11	380	9,475	41,496	139	41,636
Molecular Foundry	31,090	139	1,453	1,854	34,536	2,176	36,712
Energy Technologies	105,260	2,306	4,352	12,707	124,626	-	124,626
ETA Area Office	140	-	-	-	140	-	140
Building Technology & Urban Systems	38,317	161	572	3,913	42,963	-	42,963
Cyclotron Road	881	-	219	242	1,343	-	1,343
Energy Analysis & Environmental Impacts	38,588	803	3,409	4,230	47,030	-	47,030
Energy Storage & Distributed Resources	27,333	1,342	152	4,322	33,150	-	33,150
Physical Sciences	79,954	11,891	7,308	4,230	103,384	34,041	137,425
Accelerator Technology & Applied Physics	16,683	7,073	-	926	24,683	16,839	41,522
Engineering	-	1,393	39	2,023	3,455	-	3,455
Nuclear Science	23,228	1,030	6,522	846	31,625	6,839	38,464
Physics	40,043	2,396	748	434	43,621	10,363	53,984
DIVISION TOTAL	752,525	46,109	43,499	53,116	895,249	106,004	1,001,254
Note: Minor variances may occur due to rounding.							

Costs by Direct Funding Source by Area and Division, FY2019 (\$K)

Division	FY2019						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal	Operating Subtotal	Capital and Equipment	Total
Biosciences	127,723	2,098	28,513	16,863	175,197	794	175,991
Biological Systems & Energy	33,311	948	7,414	4,847	46,520	-	46,520
Environmental Genomics & System Biology	10,325	-	5,911	2,875	19,111	-	19,111
Joint Genome Institute	67,939	-	-	271	68,210	-	68,210
Molecular Biophysics & Integrated Bioimaging	16,147	1,150	15,188	8,870	41,356	794	42,150
Computing Sciences	154,614	21,989	2,221	1,914	180,738	2,486.55	183,225
Computational Research	27,285	17,680	2,182	499	47,646	-	47,646
National Energy Research Scientific Computing Center	82,154	1,658	-	1,196	85,008	2,487	87,495
Scientific Networking	45,174	2,651	39	220	48,084	-	48,084
Directorate & Operations (a)	23,321	177	146.57	-	23,644	49,426.18	73,070
Environment, Health, and Safety	280	2	-	-	282	-	282
Facilities	4,425	-	-	-	4,425	-	4,425
Human Resources	923	-	-	-	923	-	923
Information Technology	3,673	118	-	-	3,790	-	3,790
Laboratory Directorate	49	-	147	-	196	-	196
Office of the CFO (b)	-	43	-	-	-	-	43
Projects and Infrastructure Modernization	12,108	-	-	-	12,108	27,372	39,480
Public Affairs	-	-	-	-	-	-	-
ALS-U	1,863	14	-	-	1,877	22,054	23,931
Earth & Environmental Sciences	57,234	6,652	414	7,245	71,545	157.42	71,703
Climate & Ecosystems	33,166	3,143	336	1,422	38,066	-	38,066
Energy Geosciences	24,068	3,509	78	5,823	33,479	157	33,636

Note: Minor variances may occur due to rounding.
(a) Directorate & Operations reorganized in FY2019, Projects and Infrastructure Modernization was created and moved out of Facilities.
(b) Office of the CFO includes Inter-Entity Work Orders (IEWO) for the Bay Area Site Office (BASO).

continued

Costs by Direct Funding Source by Area and Division, FY2019 (\$K)

Division	FY2019						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal	Operating Subtotal	Capital and Equipment	Total
Energy Sciences	152,998	444	2,316	12,707	168,465	10,769.35	179,235
Advanced Light Source	62,526	38	-	2,148	64,713	5,568	70,281
Chemical Sciences	26,018	332	200	248	26,798	966	27,764
Materials Sciences	32,744	39	106	8,448	41,338	951	42,289
Molecular Foundry	31,710	34	2,010	1,862	35,617	3,284	38,901
Energy Technologies	97,144	1,696	3,602	19,810	122,252	-	122,252
Building Technology & Urban Systems	32,997	179	550	6,516	40,242	-	40,242
Cyclotron Road	2,502	-	286	272	3,059	-	3,059
Energy Analysis & Environmental Impacts	33,037	1,031	2,593	7,561	44,221	-	44,221
Energy Storage & Distributed Resources	28,609	487	173	5,461	34,730	-	34,730
Physical Sciences	71,616	14,018	6,319	5,730	97,683	42,622.04	140,305
Accelerator Technology & Applied Physics	16,101	11,924	-	1,216	29,241	9,325	38,566
Engineering	-	400	18	1,340	1,758	6	1,764
Nuclear Science	22,661	878	5,244	2,283	31,066	6,371	37,437
Physics	32,854	816	1,058	890	35,618	26,919	62,537
DIVISION TOTAL	684,649	47,075	43,532	64,270	839,525	106,256	945,781
Note: Minor variances may occur due to rounding.							

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

Division	FY2018					
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	Operating Subtotal	Capital and Equipment	Total
Biosciences	114,387	1,544	28,818	161,924	534	162,458
Biological Systems & Energy	25,842	309	8,406	38,719	-	38,719
Environmental Genomics & System Biology	7,861	12	5,631	16,894	-	16,894
Joint Genome Institute	65,233	-	-	65,370	534	65,904
Molecular Biophysics & Integrated Bioimaging	15,452	1,223	14,781	40,941	-	40,941
Computing Sciences	154,269	19,275	2,135	176,878	6,430	183,308
Computational Research	25,793	15,649	2,094	43,796	-	43,796
National Energy Research Scientific Computing Center	91,548	545	-	92,834	6,430	99,264
Scientific Networking	36,928	3,081	41	40,248	-	40,248
Directorate & Operations (a)	23,424	286	17	23,727	50,972	74,699
Environment, Health, and Safety	69	-	-	69	-	69
Facilities	18,862	-	-	18,862	50,972	69,834
Information Technology	3,694	197	-	3,891	-	3,891
Laboratory Directorate	30	45	17	92	-	92
Office of the CFO (b)	-	37	-	37	-	37
Public Affairs	-	-	-	-	-	-
Human Resources	770	7	-	777	-	777
Earth & Environmental Sciences	53,052	5,961	566	66,677	117	66,794
Climate & Ecosystems	30,302	3,467	387	35,236	110	35,345
Energy Geosciences	22,750	2,495	179	31,442	7	31,449
Energy Sciences	151,530	438	2,458	165,000	7,134	172,134
Advanced Light Source	73,603	34	-	75,424	3,629	79,054
Chemical Sciences	23,997	221	240	25,468	517	25,985
Materials Sciences	25,446	35	-	32,349	997	33,346
Molecular Foundry	28,484	148	2,218	31,759	1,991	33,750
Energy Technologies	81,568	2,352	4,768	110,305	-	110,305
Building Technology & Urban Systems	23,861	579	1,738	34,223	-	34,223
Cyclotron Road	2,480	-	123	2,629	-	2,629
Energy Analysis & Environmental Impacts	30,788	615	2,408	42,270	-	42,270
Energy Storage & Distributed Resources	24,439	1,158	499	31,183	-	31,183
Physical Sciences	70,862	17,576	7,911	101,304	36,182	137,486
Accelerator Technology & Applied Physics	19,927	16,181	-	37,429	4,924	42,353
Engineering	-	323	131	1,583	571	2,153
Nuclear Science	20,508	480	6,770	29,829	2,735	32,565
Physics	30,426	593	1,009	32,463	27,953	60,416
DIVISION TOTAL	649,093	47,432	46,674	805,816	101,369	907,185

Note: Minor variances may occur due to rounding.

(a) Directorate & Operations reorganized in FY2018, Protective Services moved into Facilities.

(b) Office of the CFO includes Inter-Entity Work Orders (IEWO) for the Bay Area Site Office (BASO).

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

Division	FY2017						
	DOE Operating	DOE Integrated Contractors Costs	SPP Federal	SPP Non-Federal	Operating Subtotal	Capital and Equipment	Total
Biosciences	126,222	969	26,570	15,680	169,441	845	170,286
Biological Systems & Energy	32,152	120	6,671	4,824	43,767	-	43,767
Environmental Genomics & System Biology	6,435	-	6,313	3,086	15,834	-	15,834
Joint Genome Institute	70,546	-	-	251	70,797	845	71,642
Molecular Biophysics & Integrated Bioimaging	17,089	849	13,586	7,519	39,043	-	39,043
Computing Sciences	154,620	14,021	3,735	356	172,732	-	172,732
Computational Research	26,290	9,461	1,725	190	37,666	-	37,666
National Energy Research Scientific Computing Center	92,953	169	1,995	62	95,180	-	95,180
Scientific Networking	35,377	4,390	15	104	39,886	-	39,886
Directorate & Operations	24,912	567	1	-	25,481	17,466	42,947
Environment, Health, and Safety	29	-	-	-	29	-	29
Facilities	15,773	-	-	-	15,773	17,459	33,231
Information Technology	3,861	338	-	-	4,200	-	4,200
Laboratory Directorate	150	67	1	-	219	-	219
Other	-	162	-	-	162	-	162
Protective Services	3,641	-	-	-	3,641	8	3,648
Public Affairs	1,459	-	-	-	1,459	-	1,459
Earth & Environmental Sciences	52,165	5,080	1,299	6,721	65,265	167	65,432
Climate & Ecosystems	30,998	3,506	735	1,252	36,491	167	36,659
Energy Geosciences	21,167	1,574	564	5,468	28,774	-	28,774
Energy Sciences (a)	145,620	578	2,382	9,845	158,425	5,711	164,136
Advanced Light Source	67,228	135	11	1,692	69,066	4,834	73,900
Chemical Sciences	25,586	69	9	1,038	26,702	-	26,702
Material Sciences	24,648	162	-	6,743	31,553	(0)	31,553
Molecular Foundry	28,158	212	2,362	372	31,104	877	31,981
Energy Technologies	85,644	1,748	6,404	19,341	113,137	-	113,137
Building Technologies & Urban Systems	28,346	59	1,873	7,941	38,218	-	38,218
Cyclotron Road	2,932	-	5	-	2,937	-	2,937
Energy Analysis & Environmental Impacts	28,659	979	3,407	7,605	40,649	-	40,649
Energy Storage & Distributed Resources	25,707	710	1,120	3,796	31,333	-	31,333
Physical Sciences	68,019	18,480	7,740	5,425	99,664	29,780	129,444
Accelerator Technology & Applied Physics	17,848	17,647	-	2,158	37,652	5,938	43,590
Engineering	-	218	65	977	1,260	115	1,375
Nuclear Science	21,153	168	7,080	2,118	30,519	1,610	32,130
Physics	29,018	448	595	172	30,232	22,117	52,349
DIVISION TOTAL	657,202	41,444	48,131	57,368	804,145	53,970	858,115

Note: Minor variances may occur due to rounding.
(a) Energy Sciences reorganized in FY2017. Molecular Foundry division created (formerly in Materials Sciences division).

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

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

Indirect Budget Costs by Area and Division, FY2020 (\$K)

Area and Division	Distributed Support Costs			Institutional Costs							Total (d)
	ALD/Org. Burden	Service Centers (b)	Other (c)	LDRD	IGPP	TCR	G&A	Site Support	Procurement Burden	Travel Burden	
Biosciences	12,621	5,709		3,981							22,310
Bioscience Area Office	12,621	546									13,167
Biological Systems & Energy		1,958		1,125							3,083
Environmental Genomics & System Biology				956							956
Joint Genome Institute		1,881		782							2,663
Molecular Biophysics & Integrated Bioluminescence		1,324		1,118							2,442
Computing Sciences	8,459	3,223		4,491							16,173
Computing Sciences ALD	3,894	3,223									7,118
Computational Research	2,764			4,220							6,984
National Energy Research Scientific Computing Center	1,294										1,294
Scientific Networking	506			271							777
Directorate & Operations	9,648	24,178	-	194	15,789	8,081	92,156	110,593	16,715	724	278,077
Laboratory Directorate		1,311		194			25,486	504			27,496
Environment, Health, and Safety								25,041			25,041
Facilities	4,881	8,595						61,011	2,055		76,543
Human Resources		4,882					15,356				20,238
Information Technology	3,236	9,182					35,348				47,766
Office of the CFO (a)		208					9,153		14,660	724	24,745
Operations						8,081	3,961				12,042
Projects & Infrastructure Modernization	1,530				15,789		2,851	13,547			33,717
Security and Emergency Services								10,490			10,490

Note: Minor variances may occur due to rounding.

(a) Office of the CFO includes Inter-Entity Work Orders (IEWO) for the Bay Area Site Office (BASO).

(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 National & Homeland Security.

(d) 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.

continued

Indirect Budget Costs by Area and Division, FY2020 (\$K)

Area and Division	Distributed Support Costs			Institutional Costs						Total (c)	
	ALD/Org. Burden	Service Centers (a)	Other (b)	LDRD	IGPP	TCR	G&A	Site Support	Procurement Burden		Travel Burden
Earth & Environmental Sciences	5,167	53		2,366				21			7,607
Earth & Environmental Science ALD	5,167	23						21			5,211
Climate & Ecosystems				1,371							1,371
Energy Geosciences		30		995							1,025
Energy Sciences	10,648	453		4,956							16,057
Energy Sciences ALD	1,091										1,091
Advanced Light Source	2,688			585							3,273
Chemical Sciences	2,329			822							3,151
Materials Sciences	2,745	453		1,982							5,181
Molecular Foundry	1,795			1,567							3,361
Energy Technologies	8,293	3,305		3,253							14,851
ETA Area Office	8,293										8,293
Building Technology & Urban Systems		1,125		586							1,711
Energy Storage & Distributed Resources		909		1,062							1,970
Energy Analysis & Environmental Impacts		1,271		1,605							2,876
Physical Sciences	11,800	2,318	232	3,822			2,968				21,140
Physical Sciences ALD	612										612
Accelerator Technology & Applied Physics	1,715			1,467							3,183
Engineering	5,841	1,929		188			2,968				10,926
Nuclear Science	1,826	389	232	1,137							3,584
Physics	1,805			1,030							2,835
GRAND TOTAL	66,635	39,241	232	23,063	15,789	8,081	95,123	110,613	16,715	724	376,216

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 cost.
(b) Includes: LBNL's Office of National & Homeland Security.
(c) 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.

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 cost.

(b) Includes: LBNL's Office of National & Homeland Security.

(c) 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.

Average FTE Breakdown by Area and Division, FY2020

Area and Division	Direct Funded FTEs				Indirect Funded FTEs				Total FTEs
	DOE Direct Operating	Other Direct Operating (b)	Capital & Equipment	Direct Funded Total	ALD/ Org. Burden	Service Centers (c)	Operations Overhead (d)	Indirect Funded Total	
Biosciences	354.5	107.2	-	461.7	74.1	16.6	20.1	110.8	572.5
Biological Systems & Energy	88.6	32.4	-	121.0	2.0	6.8	5.7	14.4	135.5
Bioscience Area Office	-	-	-	-	68.6	3.5	-	72.1	72.1
Environmental Genomics & System Biology	63.2	25.6	-	88.8	1.8	-	6.3	8.1	96.9
Joint Genome Institute	177.2	0.3	-	177.5	0.1	0.4	4.0	4.5	182.0
Molecular Biophysics & Integrated Bioimaging	25.4	48.9	-	74.3	1.7	5.9	4.1	11.7	86.1
Computing Sciences	256.8	73.4	-	330.2	38.9	-	18.9	57.7	387.9
Computational Research	75.8	62.1	-	137.9	11.3	-	16.7	28.0	165.8
Computing Sciences ALD	-	-	-	-	16.2	-	-	16.2	16.2
National Energy Research Scientific Computing Center	105.3	9.8	-	115.1	7.6	-	1.2	8.8	123.9
Scientific Networking	75.6	1.5	-	77.2	3.8	-	1.0	4.8	82.0
Directorate & Operations	19.3	0.1	117.5	136.9	38.5	34.4	708.1	781.1	918.0
ALS-U	-	0.0	108.0	108.0	-	-	-	-	108.0
Office of the CFO (a)	-	0.1	-	0.1	-	0.3	141.9	142.2	142.3
Environment, Health, Safety & Security	-	-	-	-	-	-	99.2	99.2	99.2
Facilities	0.2	-	-	0.2	19.5	2.2	163.9	185.6	185.8
Human Resources	2.5	-	-	2.5	-	-	64.2	64.2	66.7
Information Technology	6.4	-	-	6.4	12.4	27.1	81.9	121.3	127.7
Laboratory Directorate	0.3	-	-	0.3	-	4.9	89.0	93.9	94.2
Operations	-	-	-	-	-	-	24.4	24.4	24.4
Projects and Infrastructure Modernization	5.1	-	9.6	14.7	6.6	-	29.7	36.3	51.0
Security and Emergency Services	4.8	-	-	4.8	-	-	13.9	13.9	18.8

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 38.8 FTEs from non-contract projects (CSRUC, IJE, IPA, MLA, Royalties, and UC Construction Projects).

(a) Office of the CFO includes Inter-Entity Work Orders (IEWO) for the Bay Area Site Office (BASO)

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

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

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

continued

Average FTE Breakdown by Area and Division, FY2020

Area and Division	Direct Funded FTEs				Indirect Funded FTEs				Total FTEs
	DOE Direct Operating	Other Direct Operating (a)	Capital & Equipment	Direct Funded Total	ALD/ Org. Burden	Service Centers (b)	Operations Overhead (c)	Indirect Funded Total	
Earth & Environmental Sciences	147.2	37.9	-	185.1	22.4	0.2	12.6	35.2	220.3
Climate & Ecosystems	89.6	16.2	-	105.8	-	-	6.6	6.6	112.4
Earth & Environmental Science ALD	-	-	-	-	22.4	0.1	0.1	22.6	22.6
Energy Geosciences	57.6	21.6	-	79.3	-	0.1	5.9	6.0	85.3
Energy Sciences	464.1	47.2	13.8	525.1	47.2	1.6	27.8	76.6	601.7
Advanced Light Source	155.3	1.5	13.7	170.5	10.8	-	3.8	14.6	185.1
Chemical Sciences	98.8	2.6	-	101.4	11.3	-	3.8	15.2	116.5
Energy Sciences ALD	-	-	-	-	2.9	-	-	2.9	2.9
Material Sciences	130.4	26.2	0.0	156.7	12.5	1.6	11.4	25.4	182.1
Molecular Foundry	79.6	17.0	0.0	96.5	9.6	-	8.8	18.4	115.0
Energy Technologies	259.6	51.1	-	310.7	35.1	21.2	14.8	71.1	381.8
Building Technology & Urban Systems	87.5	14.6	-	102.1	-	6.8	2.8	9.6	111.7
Cyclotron Road	1.6	1.8	-	3.4	-	-	-	-	3.4
Energy Analysis Environmental Impact	79.9	19.9	-	99.8	-	8.5	3.9	12.4	112.2
Energy Storage & Distribution	90.0	14.8	-	104.8	-	5.9	8.1	14.0	118.8
ETA Area Office	0.6	-	-	0.6	35.1	-	-	35.1	35.7
Physical Sciences	188.3	59.3	49.9	297.5	54.9	9.0	23.6	87.4	384.9
Accelerator Technology & Applied Physics	43.3	18.4	26.6	88.3	8.8	-	5.2	14.0	102.3
Engineering	-	7.5	-	7.5	25.2	7.8	9.1	42.1	49.6
Nuclear Science	58.9	24.4	10.1	93.4	8.9	1.2	6.0	16.1	109.5
Physical Sciences ALD	0.5	-	-	0.5	2.0	-	-	2.0	2.4
Physics	85.6	9.0	13.2	107.8	10.0	-	3.3	13.3	121.1
TOTAL	1,689.7	376.1	181.3	2,247.1	311.1	83.0	825.9	1,220.0	3,467.1

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 38.8 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, TCR, and LBNL's Office of National and Homeland Security.

Table 1.5

Funds Held for Others Cost Trends, FY2016-FY2020 (\$K)

Funding Source	FY2016	FY2017	FY2018	FY2019	FY2020
Royalty	3,465	3,240	2,793	1,713	1,737
Contractor Supported Research (CSR)	4,026	3,050	3,135	4,780	5,172
Inter-Location Appointments (ILA)	3,664	2,957	2,970	3,265	3,981
UC Construction Projects	455	185	-	-	-
Other	20	252	161	292	137
Total	11,630	9,684	9,059	10,050	11,027
Note: Royalty project costs decreased by 39% or (\$1,081K) in FY2019, primarily due to the Zheng e TEM Microscope purchased in FY2018 and the winding down of the Flexlab improvements project in FY2019. Contractor Supported Research increased by 52% or \$1,645K in FY2019, primarily due to \$1,300K one time purchase.					

DIRECT FUNDING — DOE & REIMBURSABLE WORK

2

Total Laboratory Funding and Costs

Total Laboratory Funding - \$1.193B

Laboratory funding increased \$105M to \$1.193B in FY2020, enabling researchers at Lawrence Berkeley National Laboratory to continue to seek science solutions to solve some of the greatest problems facing the world. Office of Science funding increased by \$63M in FY2020. Most notable are the following:

- Funding for Science Laboratories Infrastructure (SLI) increased by \$35M in FY2020 due to the Grizzly Substation Yard Expansion (\$15M), BioEPIC (\$10M increase over FY2019 levels) and initial funding for the Seismic Safety Modernization project (\$10M).
- Advanced Scientific Computing Research (ASCR) increased \$20M, driven in large part by the new Quantum Science Accelerator (QSA) center, which contributed \$12M to the overall increase. Funding also increased in support of the NERSC (\$8M) and ESnet (\$5M), the Department of Energy's dedicated science network. These increases were offset by a modest decrease in Mathematical, Computational and Computer Sciences Research (\$5M).
- Biological and Environmental Research (BER) increased \$13M due to an increase in funding for the Joint Genome Institute (JGI, \$10M), as well as funding provided in support of multiple COVID research projects (\$6M).
- High Energy Physics (HEP) decreased \$10M as the funding for the fabrication of the LUX-ZEPLIN detector ended in FY2019 and has since been transitioned to operations.

Energy Efficiency and Renewable Energy (EERE) also provided significant funding in FY2020, contributing \$58M toward the Laboratory's overall increase. The largest single driver is the NAWI project (\$41M), funded by the Advance Manufacturing Office (AMO) in EERE. Also contributing to the increase were Building Technologies Office (BTO, \$9M) and Solar Energy Technologies Office (SETO, \$5M).

Considerable increases in Office of Science and EERE funding were offset by slight decreases in various other programs, including ARPA-E (-\$3M), National Nuclear Security Administration (-\$3M), Environmental Management (-\$3M), Fossil Energy (-\$3M) and Office of Electricity (-\$2M).

While funding from Strategic Partnership Projects remained relatively flat in total, the funding provided by federal sponsors increased by \$5M, while funding for non-federal and Cooperative Research and Development Agreements decreased by \$3M.

The increase in funding in recent years is reflective of the trust that Congress and the Department of Energy place in the employees of the Laboratory as stewards of national resources, committed to DOE's critical scientific mission.

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Total Laboratory Costs - \$1.001B

FY2020 marks the first year that Berkeley Lab has exceeded \$1B in annual costs, which represents a \$55M increase over FY2019 levels.

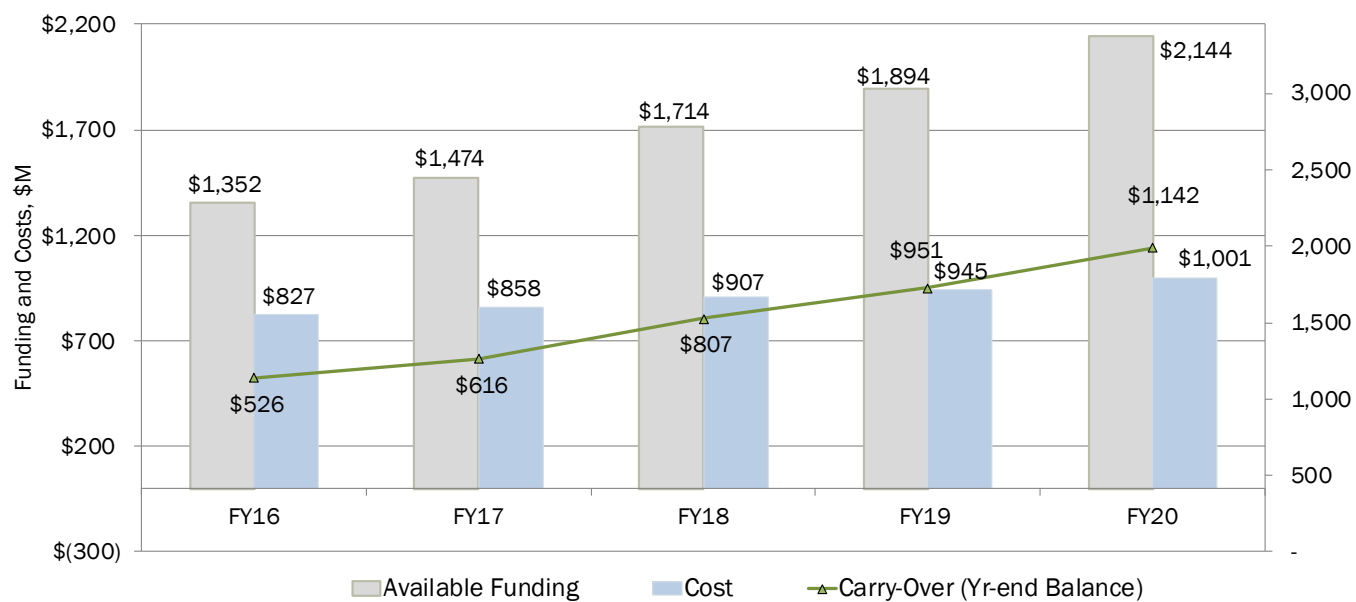
Office of Science costs increased by \$57M, largely in the area of Operating spending. The Laboratory experienced notable increases in ASCR (\$35M), as spending on ESnet6 (\$20M) and NERSC-9 (\$11M) increased as compared to FY2019. BER (\$16M) experienced increased spending at the JGI (\$10M) and in the area of Earth and Environmental Systems Sciences (\$3M). Finally, HEP (\$7M) experienced growth in Dark Energy and Dark Matter research (\$6M) and Artificial Intelligence and Machine Learning (\$4M).

Capital spending remained flat in total, however, the large swings in project spending demonstrate that this continues to be an area of focus at the Laboratory. SLI-funded construction spending related to the Integrative Genomics Building decreased by \$19M as the project reached CD-4, but was offset by increases related to BioEpic (\$5M) and Seismic Safety Modernization (\$3M). LUX-ZEPLIN and DESI, funded by HEP, decreased by \$18M, while BELLA increased by \$3M. Finally, BES spending related to the Advanced Light Source Upgrade (ALS-U) increased by \$15M.

Outside of the Office of Science, the largest contributor to the spending increase was EERE, which increased by \$15M. The Laboratory has received substantial increases in funding from EERE in recent years, and this increase in spending is reflective of the ramp up necessary to support that program growth. The spending increases were realized primarily in BTO (\$12M) and AMO (\$2M).

Finally, spending in the area of Sponsored Research decreased by \$12M, largely in the area of state and local governments and non-profit organizations. Refer to Section 1, Institutional Information, for more information regarding how Program dollars were spent in FY2020.

Historical Trends: Funding, Cost and Carryover



FY2020 Total Available funding includes \$951M of carryover plus new annual funding of \$1,193M

Table 2.1

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

LBNL Fund Trends (BA) by funding source (\$K)	FY2016	FY2017	FY2018	FY2019	FY2020
DOE DIRECT OPERATING					
Administrator for National Nuclear Security Administration	13,369	10,853	9,918	10,548	7,380
Advanced Research Projects Agency - Energy	3,033	9,276	580	5,653	3,077
Assistant Secretary for Electricity Delivery & Energy Reliability	10,145	10,289	7,002	4,540	2,168
Assistant Secretary for Energy Efficiency and Renewable Energy	91,435	106,908	111,062	100,414	158,472
Office of Energy Information					72
Assistant Secretary for Environmental Management	16,715	9,072	40,900	34,920	31,430
Assistant Secretary for Fossil Energy	7,263	13,972	18,829	9,296	6,164
Assistant Secretary for Nuclear Energy	2,519	3,596	3,396	3,713	3,776
Assistant Secretary for International Affairs	3,773	3,826	473	(259)	(6)
Office of Technology Transitions	-	-	-	80	198
Office of Energy and Threat	179	226	86	149	171
Office of Energy Policy & Systems Analysis	1,862	650	(2)	(1)	-
Office of Environment, Health, Safety and Security	310	40	525	342	321
Office of Indian Energy Policy & Programs	35	-	-	-	-
Office of Legacy Management	169	250	-	-	263
Office of Cybersecurity, Energy Security and Emergency	-		-	225	-
Office of Science	548,159	558,594	613,485	633,304	675,588
Office of the CFO	200	-	-	1,998	-
Office of Indian Energy Policy & Programs	-	-	-	(0)	-
Total DOE Direct Operating	699,165	727,551	806,255	804,921	889,074
OTHER DIRECT OPERATING					
Federal Agencies	51,519	49,042	47,924	44,958	49,671
Non-Federal Sponsors (a)	52,376	55,063	56,152	61,568	58,824
Cooperative Research and Development Agreements	2,588	2,685	2,936	2,024	1,531
DOE Integrated Contractors (b)	23,328	41,444	47,432	47,075	46,109
Total Other Direct Operating	129,810	148,234	154,444	155,625	156,135
TOTAL OPERATING	828,975	875,786	960,700	960,546	1,045,209
Note: Minor variances may occur due to rounding. Data Source: Budget Authority as provided in the Berkeley Lab final contract modification for the fiscal year. (a) Includes both funding and deobligations for Non-Federal Sponsors who are precluded by law from paying an advance under the WN program. (b) Total funding for Integrated Contractors is assumed to be equal to cost incurred.					

continued

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

LBNL Fund Trends (BA) by funding source (\$K)	FY2016	FY2017	FY2018	FY2019	FY2020
DOE PLANT AND CAPITAL EQUIPMENT					
Basic Equipment/Major Items of Equipment					
Administrator for National Nuclear Security Administration	1,375	1,428	1,190	425	-
Assistant Secretary for Energy Efficiency and Renewable Energy	990	-	-	(0)	
Office of Science	39,889	39,915	56,585	56,809	37,813
Total DOE Capital Equipment	42,254	41,342	57,775	57,234	37,813
General Plant Projects					
Office of Science	-	9,000	16,400	(10)	15,000
Accelerator Improvement Projects					
Office of Science	1,000	2,000	8,700	4,400	9,021
Line-Item Construction					
Assistant Secretary for Energy Efficiency and Renewable Energy	-	-	-	-	
Office of Science	25,250	20,098	54,333	65,000	85,500
Total DOE Plant	26,250	31,098	79,433	69,390	109,521
TOTAL DOE PLANT AND CAPITAL EQUIPMENT	68,504	72,440	137,209	126,624	147,334
TOTAL LABORATORY	897,479	948,226	1,097,908	1,087,169	1,192,543

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.

Table 2.2

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

LBNL Cost Trends by Funding Source (\$K)	FY2016	FY2017	FY2018	FY2019	FY2020
DOE DIRECT OPERATING					
Administrator for National Nuclear Security Administration	13,698	11,404	8,956	9,924	9,330
Advanced Research Projects Agency - Energy	1,614	2,623	4,392	4,434	3,831
Assistant Secretary for Electricity Delivery & Energy Reliability	9,136	8,639	7,671	6,525	5,149
Assistant Secretary for Energy Efficiency and Renewable Energy	76,135	80,750	78,272	95,978	110,643
Assistant Secretary for Environmental Management	9,858	15,987	16,187	12,370	14,214
Assistant Secretary for Fossil Energy	8,037	8,083	9,134	13,055	12,203
Assistant Secretary for Nuclear Energy	2,728	2,096	2,417	5,201	4,120
Assistant Secretary for International Affairs	1,461	2,865	3,374	2,146	915
Office of Energy and Threat	182	167	147	171	172
Office of Energy Policy & Systems Analysis	2,296	934	641	197	53
Office of Environment, Health, Safety and Security	1,264	388	42	86	119
Office of Indian Energy Policy & Programs	134	1	0	-	-
Office of Legacy Management	215	58	141	87	74
Office of Technology Transitions	-	-	-	49	104
Office of Science	526,749	523,098	517,636	534,312	591,243
Office of Cybersecurity, Energy Security and Emergency					12
Office of the CFO	8	110	81	115	323
Office of Energy Information					18
Total DOE Direct Operating	653,515	657,202	649,093	684,649	752,525
OTHER DIRECT OPERATING					
Federal Agencies	49,724	48,131	46,674	43,532	43,499
Non-Federal Sponsors (a)	54,112	54,923	60,252	61,559	51,654
Cooperative Research and Development Agreements	2,469	2,446	2,366	2,711	1,462
DOE Integrated Contractors	23,328	41,444	47,432	47,075	46,109
Total Other Direct Operating	129,633	146,943	156,723	154,876	142,724
TOTAL OPERATING	783,148	804,145	805,816	839,525	895,249
DOE PLANT AND CAPITAL EQUIPMENT					
Basic Equipment/Major Items of Equipment					
Administrator for National Nuclear Security Administration	3,021	1,597	1,146	455	49
Assistant Secretary for Energy Efficiency and Renewable Energy	1,005	(0)	-	-	-
Office of Science	28,759	32,334	48,791	53,684	43,956
Total DOE Capital Equipment	32,785	33,930	49,937	54,138	44,005
General Plant Projects					
Office of Science	62	2,009	7,010	4,607	6,400
Accelerator Improvement Projects					
Office of Science	2,345	731	460	2,691	7,344
Line-Item Construction					
Assistant Secretary for Energy Efficiency and Renewable Energy	-	-	-	-	-
Office of Science	8,558	17,300	43,962	44,819	48,255
Total DOE Plant	10,966	20,040	51,432	52,117	61,999
TOTAL DOE PLANT AND CAPITAL EQUIPMENT	43,751	53,970	101,369	106,256	106,004
TOTAL LABORATORY (b)	826,899	858,115	907,185	945,781	1,001,254

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) FY2020 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 FY2020 is (\$39K).

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

Funding and Cost by Source (\$K)	FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
DOE DIRECT OPERATING				
Administrator for National Nuclear Security Administration	8,525	7,380	9,330	6,574
Advanced Research Projects Agency - Energy	7,839	3,077	3,831	7,086
Assistant Secretary for Electricity Delivery & Energy Reliability	10,431	2,168	5,149	7,450
Assistant Secretary for Energy Efficiency & Renewable Energy	126,730	158,472	110,643	174,560
Assistant Secretary for Environmental Management	72,901	31,430	14,214	90,116
Assistant Secretary for Fossil Energy	20,642	6,164	12,203	14,604
Assistant Secretary for Nuclear Energy	1,864	3,776	4,120	1,519
Assistant Secretary for International Affairs	1,033	(6)	915	112
Office of Technology Transitions	31	198	104	124
Office of Energy & Threat	22	171	172	21
Office of Energy Policy & Systems Analysis	128	-	53	75
Office of Environment, Health, Safety and Security	782	321	119	984
Office of Energy Information Administration	-	72	18	54
Office of Legacy Management	22	263	74	210
Office of Cybersecurity, Energy Security and Emergency	225	-	12	213
Office of Science	479,074	675,588	591,243	563,418
Office of the CFO	1,884	-	323	1,561
Total DOE Direct Operating	732,133	889,074	752,525	868,683
OTHER DIRECT OPERATING				
Federal Agencies	52,353	49,671	43,499	58,815
Non-Federal Sponsors (a)	29,149	58,824	51,654	35,935
Cooperative Research and Development Agreements	1,010	1,531	1,462	1,135
DOE Integrated Contractors (b)	-	46,109	46,109	-
Total Other Direct Operating (c)	82,513	156,135	142,724	95,885
TOTAL OPERATING	814,646	1,045,209	895,249	964,568
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 WN program. (b) Total funding for Integrated Contractors is assumed to be equal to cost incurred. (c) The sum of FY2020 Beginning Uncosted Obligations and FY2020 Funds, minus FY2020 Costs does not equal FY2020 Ending Uncosted Obligations due to various adjustments not reflected in the FY2020 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2020 is (\$39K).				

continued

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

Funding and Cost by Source (\$K)	FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	"FY2020 Ending Uncosted Obligations"
DOE PLANT AND EQUIPMENT				
Basic Equipment/Major Items of Equipment				
Administrator for National Nuclear Security Administration	54	0	49	5
Assistant Secretary for Energy Efficiency & Renewable Energy	(0)	-	-	0
Office of Science	52,162	37,813	43,956	46,020
Total Capital Equipment	52,216	37,813	44,005	46,024
General Plant Projects				
Office of Science	11,772	15,000	6,400	20,371
Accelerator Improvement Projects				
Office of Science	12,197	9,021	7,344	13,874
Line-Item Construction				
Assistant Secretary for Energy Efficiency & Renewable Energy	-			
Office of Science	60,135	85,500	48,255	97,380
Total DOE Plant	84,104	109,521	61,999	131,625
TOTAL DOE PLANT AND CAPITAL EQUIPMENT	136,320	147,334	106,004	177,650
TOTAL LABORATORY	950,966	1,192,543	1,001,254	1,142,217

Table 2.4

FY2020 Funding and Costs by DOE Programs (\$K)

OFFICE OF SCIENCE		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
AT10	Burning Plasma Science: Foundations	761	1,807	691	1,878
AT40	Discovery Plasma Science	1,773	3,600	990	4,383
FS10	Safeguards and Security - Science	4,139	8,574	8,284	4,428
KA21	Energy Frontier Experimental Physics	4,615	6,622	6,801	4,436
KA22	Intensity Frontier Experimental Physics	1,500	2,247	1,893	1,854
KA23	Cosmic Frontier Experimental Physics	12,861	25,210	17,843	20,227
KA24	Theoretical, Computational, and Interdisciplinary Physics	8,105	13,523	10,747	10,881
KA25	Advanced Technology R&D	8,626	16,597	13,959	11,264
KA26	Accelerator Stewardship	1,521	1,519	1,211	1,829
KB01	Medium Energy Physics	517	529	653	393
KB02	Heavy-Ion Physics	4,619	4,896	5,095	4,420
KB03	Nuclear Theory	1,520	4,558	3,446	2,632
KB04	Low Energy Physics	6,375	11,092	10,564	6,904
KC02	Materials Sciences and Engineering	23,280	34,900	32,189	25,991
KC03	Chemical Sciences, Geosciences, and Biosciences	27,825	36,043	35,182	28,685
KC04	Scientific User Facilities	35,316	93,425	88,717	40,024
KC09	BES COVID Support	-	3,050	2,815	235
KJ04	Mathematical, Computational, and Computer Sciences Research	47,808	19,028	20,871	45,965
KJ05	High Performance Computing and Network Facilities	188,154	212,797	163,618	237,332
KJ07	ASCR COVID Support	-	1,353	419	934
KL10	Internships and Visiting Faculty Activities at DOE Labs	1,254	1,586	967	1,873
KL15	Outreach	51	5	20	35
KP15	Biological Research	37	-	2	35
KP16	Biological Systems Science	63,400	136,399	128,230	71,569
KP17	Earth and Environmental Systems Sciences	34,303	29,977	33,334	30,946
KP18	COVID-19 Support - BER	-	5,215	2,262	2,953
ST50	Isotope Research	706	1,036	439	1,304
ST60	Isotope Production	6	-	-	6
Total Operating		479,074	675,588	591,243	563,418

continued

FY2020 Funding and Costs by DOE Programs (\$K)

OFFICE OF SCIENCE		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
CAPITAL EQUIPMENT					
AT10	Burning Plasma Science: Foundations	3,000	1,474	496	3,978
AT40	Discovery Plasma Science	1,535	-	1,169	366
KA21	Energy Frontier Experimental Physics	11,024	15,825	12,789	14,060
KA23	Cosmic Frontier Experimental Physics	10,862	(1,727)	7,047	2,088
KA25	Advanced Technology R&D	1,877	1,464	1,131	2,210
KA26	Accelerator Stewardship	7	-	-	7
KB02	Heavy-Ion Physics	61	-	-	61
KB04	Low Energy Physics	6,143	6,600	6,839	5,904
KC02	Materials Sciences and Engineering	149	-	139	10
KC03	Chemical Sciences, Geosciences, and Biosciences	703	-	(1)	704
KC04	Scientific User Facilities	11,086	5,052	5,708	10,430
KJ05	High Performance Computing and Network Facilities	5,210	4,500	6,540	3,170
KJ07	ASCR COVID Support	-	1,400	1,369	31
KP16	Biological Systems Science	505	1,664	(0)	2,169
KP18	COVID-19 Support - BER	-	1,560	729	831
Total Capital Equipment		52,162	37,813	43,956	46,020
GENERAL PLANT PROJECTS					
KG07	Facilities and Infrastructure	11,772	15,000	6,400	20,371
Total General Plant Projects		11,772	15,000	6,400	20,371
ACCELERATOR IMPROVEMENT PROJECTS					
KA25	Advanced Technology R&D	7,048	-	4,154	2,895
KC04	Scientific User Facilities	5,148	9,021	3,190	10,979
Total Accelerator Improvement Projects		12,197	9,021	7,344	13,874
LINE-ITEM CONSTRUCTION					
39KC	Basic Energy Sciences	53,946	60,000	36,620	77,326
39KG	Science Laboratories Infrastructure	6,190	25,500	11,634	20,055
Total Line-Item Construction		60,135	85,500	48,255	97,381
TOTAL DOE PLANT		84,104	109,521	61,999	131,626
TOTAL OFFICE OF SCIENCE		615,340	822,922	697,198	741,064
Note: Minor variances may occur due to rounding.					

continued

FY2020 Funding and Costs by DOE Programs (\$K)

ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
BM01	Biomass Biofuels Energy Systems	14,011	10,268	9,619	14,660
BT01	Residential Buildings Integration	1,843	1,714	1,987	1,570
BT02	Commercial Buildings Integration	9,433	10,343	8,734	11,042
BT03	Emerging Technologies	15,649	19,138	18,130	16,657
BT04	Equipment and Buildings Standards	21,931	15,201	17,885	19,247
BT08	EE Building Systems Design Energy Innovation Hubs	0	-	-	0
EB21	Solar Energy	17	-	-	17
EB40	Geothermal Technologies	36	-	17	19
EB57	Energy Efficiency and Renewable Energy EERE Program Support	19	-	-	19
ED20	Industrial Technical Assistance	7,805	12,425	6,988	13,242
ED27	Next Generation Manufacturing R&D Projects	7,380	3,315	3,568	7,127
ED28	Advanced Manufacturing R&D Facilities	-	41,579	2,351	39,228
EL17	Federal Energy Management Program	6,198	2,805	5,105	3,897
GT01	Enhanced Geothermal Systems	7,853	5,040	2,607	10,285
GT02	Low Temperature and Co-produced Resource	2,090	975	1,156	1,910
GT03	Hydrothermal	2,362	2,125	811	3,676
GT04	Systems Analysis	78	261	12	327
HT01	Fuel Cell Systems R&D	1,560	1,275	1,692	1,143
HT02	Hydrogen Fuel R&D	2,593	4,883	4,002	3,474
HT03	Systems Analysis	-	243	-	243
HT07	Manufacturing R&D	1	-	1	0
HT08	Technology Validation	4	-	3	2
HT11	Technology Acceleration	433	318	398	353
HT12	Hydrogen Infrastructure R&D	244	700	569	376
PG03	Strategic Priorities and Impact Analysis	1,704	1,446	1,375	1,776
PG04	Technology-to-Market	1,605	120	328	1,397
PG05	International	38	-	-	38
SL01	Concentrating Solar Power	385	-	202	183
SL02	Photovoltaic R&D	2,772	200	1,095	1,877
SL03	Systems Integration Balance of Systems and Power Electronics	1,953	727	1,568	1,112
SL04	Balance of Systems Soft Cost Reduction	2,277	4,565	1,862	4,980
SL05	Innovations in Manufacturing Competitiveness	87	108	73	123
VT02	Outreach	150	-	91	59
VT04	Advanced Combustion and Engine R&D	42	-	18	24
VT05	Materials Technology	0	-	-	0
VT06	Fuels Technology	104	-	7	97
VT12	Batteries and Electrification Technologies	5,998	12,298	10,861	7,434
VT13	Vehicle & Systems Simulation and Testing	1,605	-	1,523	82
WC01	Water Power Program	89	150	61	179

continued

FY2020 Funding and Costs by DOE Programs (\$K)

ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY (Continued)		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
WI03	State Energy Program Grants	1,411	1,364	619	2,156
WI07	Weatherization Assistance Program	146	100	136	110
WI12	Weatherization Innovation	0	-	-	0
WW02	Technology Viability	32	-	31	1
WW08	Mitigate Market Barriers	647	569	471	745
WW09	Modeling & Analysis	1,133	1,060	1,089	1,104
VT18	Analysis	343	240	367	217
VT15	Energy Efficient Mobility Systems	2,434	2,630	2,823	2,241
VT16	Advanced Engine and Fuel Technologies	35	200	210	26
VT17	Materials Technology	25	-	-	25
WW06	Technology RD&T and Resource Characterization	176	85	199	61
Total Operating		126,730	158,472	110,643	174,560
CAPITAL EQUIPMENT					
BT04	Equipment and Buildings Standards	0	-	-	0
Total Capital Equipment		0	-	0	0
TOTAL DOE PLANT		0	0	0	0
TOTAL ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY		126,730	158,472	110,643	174,560
ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
EY40	Defense Site Acceleration Completion - Technology Development and Deployment	265	800	314	751
EZ50	Non-Defense Environmental Cleanup - Small Sites	72,636	30,630	13,901	89,365
Total Operating		72,901	31,430	14,214	90,116
TOTAL ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT		72,901	31,430	14,214	90,116
Note: Minor variances may occur due to rounding.					

continued

FY2020 Funding and Costs by DOE Programs (\$K)

ASSISTANT SECRETARY FOR FOSSIL ENERGY		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
AA30	Sequestration	837	-	592	246
AA60	Advanced Energy Systems	2	82	-	84
AA65	Carbon Capture	4,895	465	2,139	3,222
AA70	Carbon Storage	8,019	2,900	4,346	6,572
AA90	Cross-cutting Research	2,808	1,607	2,921	1,494
AA95	NETL Coal Research and Development	-	6	-	6
AB05	Natural Gas Technologies	1,919	855	1,313	1,461
AC10	Oil Technology	56	-	3	53
BD00	Unconventional Fossil Energy Technologies from Petroleum - Oil Technologies	2,105	250	889	1,467
Total Operating		20,642	6,164	12,203	14,604
TOTAL ASSISTANT SECRETARY FOR FOSSIL ENERGY		20,642	6,164	12,203	14,604
ADMINISTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
CT84	Emergency Response	27	159	181	5
DN20	DNN Research and Development	2,873	6,079	6,171	2,781
DN40	Nonproliferation and Arms Control	69	325	358	36
DP09	Infrastructure and Operations Formerly RTBF	3,081	-	1,473	1,608
DP13	Engineering	161	350	291	221
DP15	Advanced Simulation and Computing	40	-	-	40
MO01	Cyber Security	1,651	-	120	1,531
MO02	Enterprise Security Computing	624	467	737	353
DP40	Nuclear Counterterrorism Incident Response	0	(0)	-	-
Total Operating		8,525	7,380	9,330	6,574
CAPITAL EQUIPMENT					
DN20	DNN Research and Development	54	-	49	5
Total Capital Equipment		54	0	49	5
TOTAL ADMINISTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION		8,579	7,380	9,380	6,579
Note: Minor variances may occur due to rounding.					

continued

FY2020 Funding and Costs by DOE Programs (\$K)

ASSISTANT SECRETARY FOR ELECTRICITY DELIVERY & ENERGY RELIABILITY		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
TE11	Transmission Reliability and Resilience	4,555	505	2,081	2,980
TE12	Resilient Distribution Systems	1,248	1,229	977	1,500
TE13	Cyber Security for Energy Delivery Systems	285	-	133	152
TE14	Energy Storage Research	1,118	121	468	770
TE15	Transformer Resilience and Advanced Components	21	(0)	3	18
TF00	Transmission Permitting and Technical Assistance	3,134	314	1,447	2,001
TG01	DO NOT USE Infrastructure Security and Energy Restoration	70	-	41	29
Total Operating		10,431	2,168	5,149	7,450
TOTAL ASSISTANT SECRETARY FOR ELECTRICITY DELIVERY & ENERGY RELIABILITY		10,431	2,168	5,149	7,450
ASSISTANT SECRETARY FOR NUCLEAR ENERGY		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
AF58	Fuel Cycle Research and Development	1,720	-	1,648	72
DF01	First Repository	15	-	-	15
FT01	Materials Recovery and Waste Form Development	-	40	3	37
FT06	Used Nuclear Fuel Disposition (UNFD)	-	3,483	2,233	1,250
KK05	Program Direction - Nuclear Energy	29	-	28	0
NT01	Crosscutting Technology Development	-	53	13	40
NT08	Joint Modeling and Simulation Program	101	200	195	106
Total Operating		1,864	3,776	4,120	1,519
TOTAL ASSISTANT SECRETARY FOR NUCLEAR ENERGY		1,864	3,776	4,120	1,519
ADVANCED RESEARCH PROJECTS AGENCY - ENERGY		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
CJ01	ARPA-E Projects	7,827	3,077	3,819	7,085
CJ02	Program Direction	12	(0)	12	1
Total Operating		7,839	3,077	3,831	7,086
TOTAL ADVANCED RESEARCH PROJECTS AGENCY - ENERGY		7,839	3,077	3,831	7,086
THE OFFICE OF CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
TI02	Electricity Delivery & Energy Reliability	225	-	12	213
Total Operating		225	0	12	213
TOTAL OFFICE OF CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE		225	0	12	213

Note: Minor variances may occur due to rounding.

continued

FY2020 Funding and Costs by DOE Programs (\$K)

OFFICE OF HEALTH SAFETY AND SECURITY		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
HS01	Employee Compensation	-	85	-	85
HS02	Operating Expenses - AU - EHSS	-	236	-	236
HQ10	Employee Compensation	49	-	19	30
HU10	Corporate Safety Program	733	(0)	100	633
Total Operating		782	321	119	984
TOTAL OFFICE OF HEALTH SAFETY AND SECURITY		782	321	119	984
ASSISTANT SECRETARY FOR INTERNATIONAL AFFAIRS		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
PE04	Office Of Environmental Analysis	0	(0)	-	-
WA22	Office of International Affairs - Program Direction	1,033	(6)	915	112
Total Operating		1,033	(6)	915	112
TOTAL ASSISTANT SECRETARY FOR INTERNATIONAL AFFAIRS		1,033	(6)	915	112
OFFICE OF ENERGY AND THREAT		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
GD60	Energy and Threat-Program	22	171	172	21
Total Operating		22	171	172	21
TOTAL OFFICE OF ENERGY AND THREAT		22	171	172	21
OFFICE OF LEGACY MANAGEMENT		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
LM01	Legacy Management Activities - Defense	22	263	74	210
Total Operating		22	263	74	210
TOTAL OFFICE OF LEGACY MANAGEMENT		22	263	74	210
OFFICE OF ENERGY POLICY & SYSTEMS ANALYSIS		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
EP01	EPSA Program Direction	129	-	53	75
Total Operating		129	-	53	75
TOTAL OFFICE OF ENERGY POLICY & SYSTEMS ANALYSIS		129	-	53	75

Note: Minor variances may occur due to rounding.

continued

FY2020 Funding and Costs by DOE Programs (\$K)

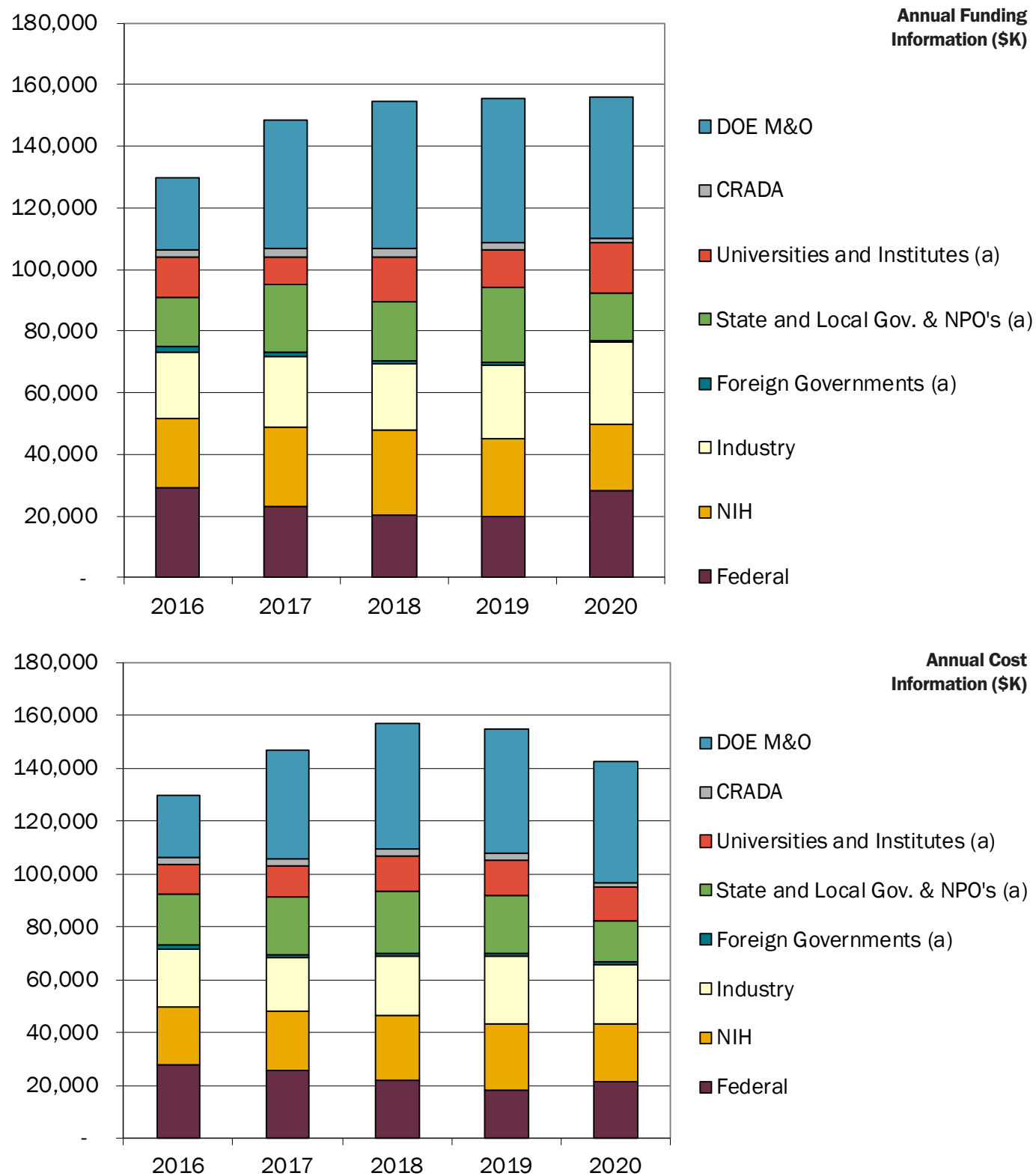
OFFICE OF THE CHIEF INFORMATION OFFICER		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
CP20	Corporate IT Planning and Architecture IM-20	1,884	-	323	1,561
Total Operating		1,884	0	323	1,561
TOTAL OFFICE OF THE CHIEF INFORMATION OFFICER		1,884	-	323	1,561
OFFICE OF ENERGY INFORMATION ADMINISTRATION		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
TA01	National Energy Information System Neis Program Support	-	72	18	54
Total Operating		-	72	18	54
TOTAL OFFICE OF ENERGY INFORMATION ADMINISTRATION		-	72	18	54
OFFICE OF TECHNOLOGY TRANSITIONS		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
OPERATING					
TT10	Contractual Support Services	31	198	104	124
Total Operating		31	198	104	124
TOTAL OFFICE OF TECHNOLOGY TRANSITIONS		31	198	104	124
All DOE PROGRAMS (\$K)		FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
TOTAL OPERATING		732,133	889,074	752,525	868,683
TOTAL CAPITAL EQUIPMENT		52,217	37,813	44,005	46,024
TOTAL GENERAL PLANT PROJECTS		11,772	15,000	6,400	20,371
TOTAL ACCELERATOR IMPROVEMENT PROJECTS		12,197	9,021	7,344	13,874
TOTAL LINE ITEM CONSTRUCTION		60,135	85,500	48,255	97,381
TOTAL FUNDING AND COSTS		868,454	1,036,408	858,529	1,046,333
Note: Minor variances may occur due to rounding.					

FY2020 Funding and Costs by Other Direct Operating Source (\$K)

Funding Source	FY2020 Beginning Uncosted Obligations	FY2020 Funds	FY2020 Costs	FY2020 Ending Uncosted Obligations
REIMBURSABLE WORK				
Federal Agencies				
Department of Agriculture	0	(0)	-	-
Department of Defense	13,334	15,778	11,442	17,748
Department of Homeland Security - Domestic Nuclear Detection Office	1,294	(28)	923	342
Department of Homeland Security - Other	-	250	-	250
Department of Homeland Security - Science & Technology	-	723	65	658
Department of Housing And Urban Development	-	-	-	-
Department of State - Other	549	580	346	789
Department of The Interior	-	1,893	843	1,075
Department of Transportation	829	680	712	817
Environmental Protection Agency	325	845	627	561
National Aeronautics And Space Administration	3,545	4,302	4,069	3,896
National Institutes of Health	28,921	21,653	22,371	28,211
National Science Foundation	-	-	-	-
Nuclear Regulatory Commission	21	-	1	20
Other Federal Agencies	3,534	2,996	2,100	4,447
Total Federal Agencies	52,353	49,671	43,499	58,815
Non-Federal Agencies				
Foreign Governments	570	446	705	331
Domestic and Foreign Industry	10,888	26,931	22,341	15,743
State and Local Governments & NPO's	12,696	15,071	15,648	12,083
Universities and Institutes	4,995	16,377	12,960	7,778
Total Non-Federal Agencies (a)	29,149	58,824	51,654	35,935
Cooperative Research and Development Agreements				
CRADA - Other	894	1,275	1,206	998
CRADA - Small Business	116	256	256	136
Total Cooperative Research and Development Agreements	1,010	1,531	1,462	1,135
TOTAL REIMBURSABLE WORK	82,513	110,027	96,616	95,885
DOE INTEGRATED CONTRACTORS				
Work Performed for Other DOE Locations (b)	-	46,109	46,109	-
Total DOE Integrated Contractors	-	46,109	46,109	-
TOTAL OTHER DIRECT OPERATING (c)	82,513	156,135	142,724	95,885
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 WN program. (b) Total funding for Integrated Contractors is assumed to be equal to cost incurred. (c) The sum of FY2020 Beginning Uncosted Obligations and FY2020 Funds, minus FY2020 Costs does not equal FY2020 Ending Uncosted Obligations due to various adjustments not reflected in the FY2020 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2020 is (\$39K).				

Figure 2.1

FY2020 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 WN program.

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

Area and Division	Fiscal Years				
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Biosciences	166,741	179,747	183,508	185,951	199,255
Biological Systems & Energy	40,785	45,481	51,228	49,694	47,925
Environmental Genomics & System Biology	17,644	22,596	18,964	23,408	27,228
Joint Genome Institute	70,884	70,715	70,386	71,196	81,025
Molecular Biophysics & Integrated Bioimaging	37,429	40,956	42,930	41,653	43,078
Computing Sciences	174,134	189,990	231,880	252,473	276,526
Computational Research	33,671	43,737	51,844	54,165	66,747
National Energy Research Scientific Computing Center	96,973	93,814	96,181	107,494	115,138
Scientific Networking	43,489	52,439	83,855	90,815	94,641
Earth & Environmental Sciences	64,679	79,953	72,940	79,905	111,464
Climate & Ecosystems	38,843	42,308	39,452	41,837	39,652
Energy Geosciences	25,836	37,646	33,487	38,068	71,812
Energy Sciences	173,469	176,437	208,425	176,679	184,560
Advanced Light Source	74,439	74,279	97,548	69,618	73,472
Chemical Sciences	27,988	29,204	27,238	30,129	27,514
Material Sciences	71,043	37,195	43,334	37,674	45,215
Molecular Foundry		35,759	40,305	39,258	38,358
Energy Technologies	125,708	140,598	128,323	121,883	134,571
Building Technologies & Urban Systems	40,138	44,214	44,554	41,008	47,755
Cyclotron Road	2,345	3,982	1,750	2,017	2,189
Energy Analysis & Environmental Impacts	46,722	56,664	46,522	41,939	50,880
Energy Storage & Distributed Resources	36,502	35,738	35,497	36,919	33,747
Physical Sciences	147,270	134,738	167,653	159,460	142,507
Accelerator Technology & Applied Physics	37,461	43,386	56,326	49,792	40,490
Engineering	2,132	1,519	1,496	1,936	4,015
Nuclear Science	35,304	32,882	39,744	38,922	39,495
Physics	72,373	56,951	70,087	68,810	58,507
Directorate & Operations (a) (b) (c) (d)	45,477	46,763	105,180	110,818	143,660
Office of the CFO (a)	(802)	(21)		23	70
Environment, Health, Safety & Security				102	100
Facilities (b)	36,520	37,458	99,597	4,079	
Human Resources			1,118	1,298	1,591
Information Technology	4,139	4,029	4,383	3,537	3,563
Laboratory Directorate	592	165	44	80	222
Operations	123	162	37		
Protective Services	3,603	3,673			
Public Affairs	1,302	1,298			
Advanced Light Source Upgrade				62,014	62,006
Projects & Infrastructure Modernization (c)				39,685	71,130
Security and Emergency Services (d)					4,979
GRAND TOTAL	897,479	948,226	1,097,908	1,087,169	1,192,543
(a) Office of the CFO includes Inter-Entity Work Orders (IEWO) for the Bay Area Site Office (BASO). (b) Directorate & Operations reorganized in FY2018, Protective Services moved into Facilities. (c) Directorate & Operations reorganized in FY2019, Projects and Infrastructure Modernization was created and moved out of Facilities. (d) Directorate & Operations reorganized in FY2020, Security and Emergency Services was created (formerly Protective Services) and moved out of Facilities.					

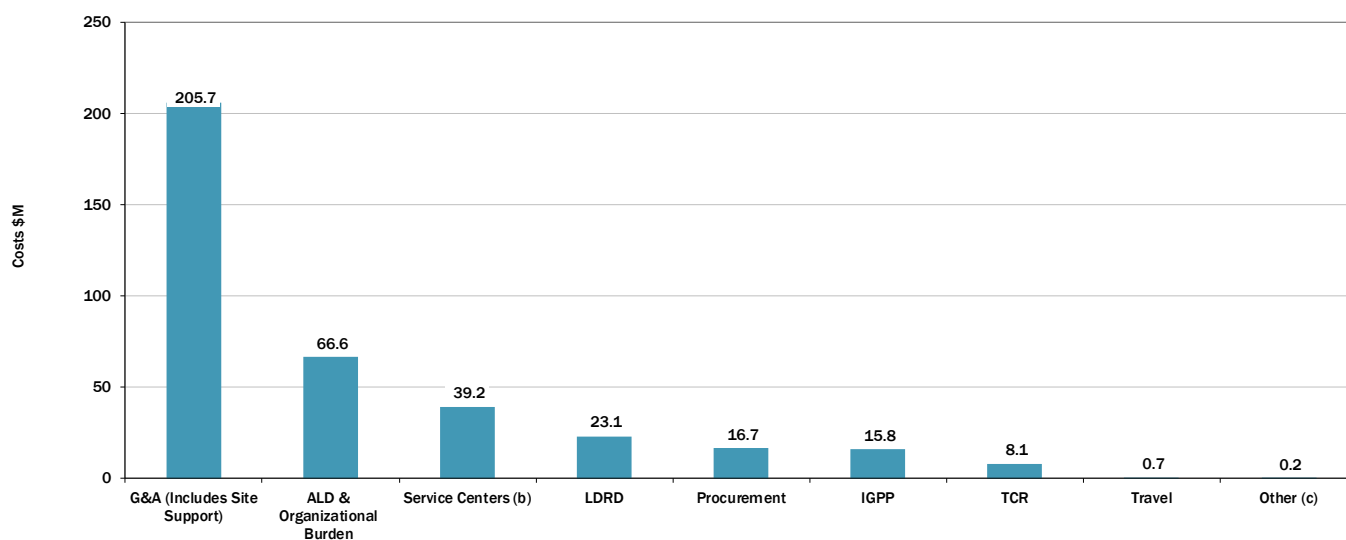
INDIRECT BUDGETS

3

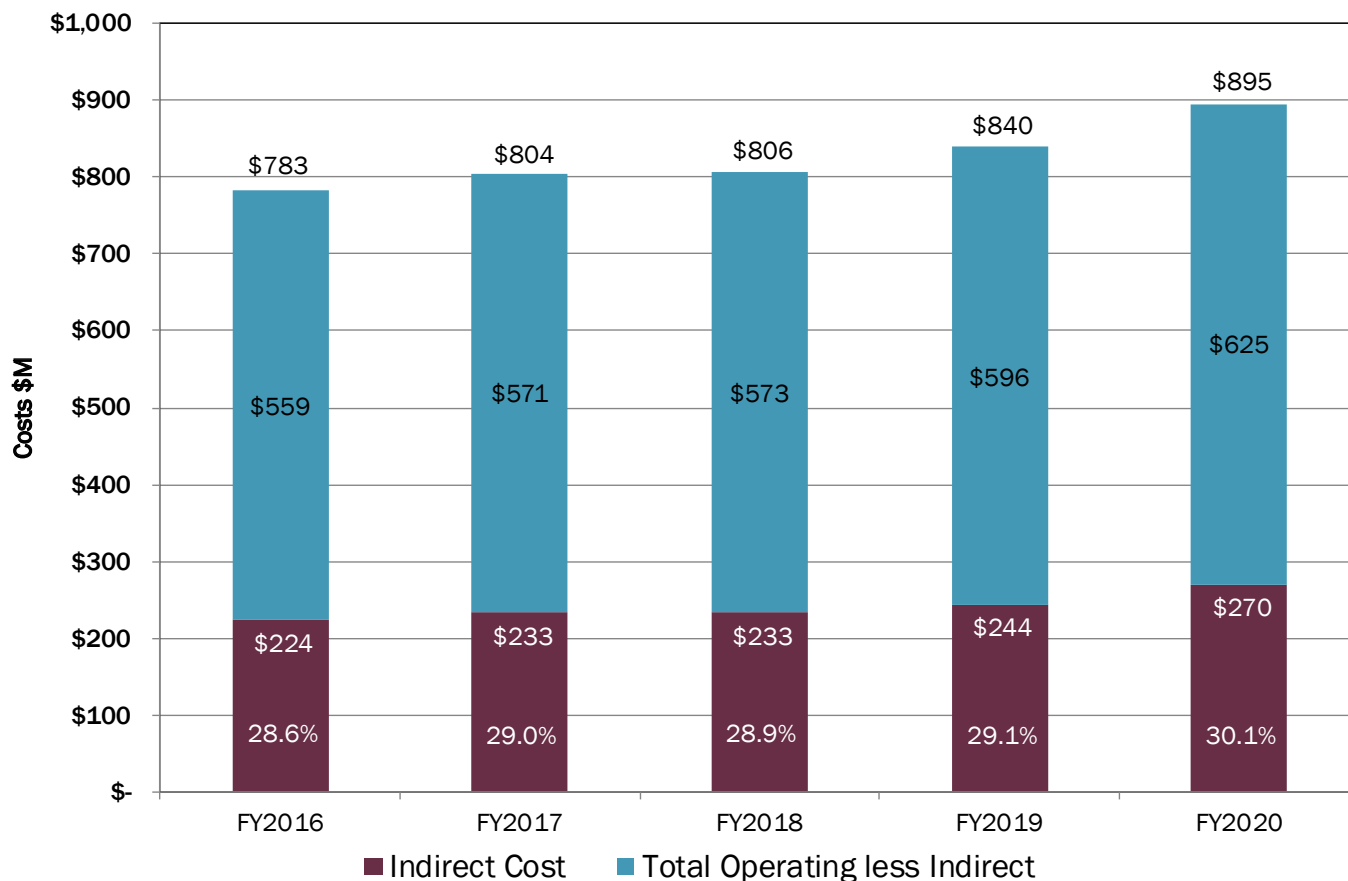
Figure 3.1

Indirect Budgets – FY2020 Costs (\$M)

Indirect Budgets (a)	FY2020 Costs (\$M)
G&A (Includes Site Support)	205.7
ALD & Organizational Burden	66.6
Service Centers (b)	39.2
LDRD	23.1
Procurement	16.7
IGPP	15.8
TCR	8.1
Travel	0.7
Other (c)	0.2
Total	376.2
(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 FY2020, LDRD cost includes \$4.5M Site Support 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 National and Homeland Security Charge.	



Institutional Overhead Costs as a Percent of Operating Costs, FY2016-FY2020 (\$K)



Notes:

- 1) 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, IGPP, LDRD, TCR, Travel, and Procurement. Percent is the percentage of indirect cost to total operating cost.
- 2) 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.
- 3) Overhead Costs as a percentage of Total Operating Costs represented in the chart above does not account for functional costs. Functional costs are an all inclusive accounting of support cost (even if they are charged to Direct funded programs). Functional costs are prescribed by DOE's annual Institutional Cost Report (ICR) process. The ICR equivalent metric in FY2020 is 33.8%.

Table 3.1

Institutional Costs by Division, FY2020 (\$K)

Division	G&A (a)	LDRD (b)	Procurement	Travel	IGPP	TCR	Total
Lab Directorate	25,990						25,990
LDRD		23,063					23,063
Associate Lab Director for Operations							
Deputy Director for Operations	3,081						3,081
Project Infrastructure Management Division	16,398				15,789		32,187
Office of Institutional Assurance and Integrity	1,391						1,391
Project Management Office	733						733
Security & Emergency Services	10,490						10,490
Environment, Health & Safety	25,041						25,041
Facilities	61,011		2,055				63,066
Human Resources	15,356						15,356
IT Division	35,348						35,348
Office of the CFO	9,153		14,660	724			24,538
Engineering	2,968						2,968
Earth Sciences	21						21
General Lab (c)	(1,244)						(1,244)
UC Management Costs						8,081	8,081
TOTAL	205,737	23,063	16,715	724	15,789	8,081	270,108

Note: Minor variances may occur due to rounding.

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

(b) LDRD costs include \$4.5M of Site Support assessment.

(c) Includes FY2019 YN01 B&R year-end accrual reversal credit \$4.2M.

Table 3.2

Institutional FTEs Charged by Division, FY2020

Division	G&A (a)	LDRD (b)	Procurement	Travel	IGPP	TCR	Total
Lab Directorate	91.2						91.2
LDRD		106.7					106.7
Associate Lab Director for Operations							
Deputy Director for Operations	9.7						9.7
Projects and Infrastructure Modernization	21.9				8.6		30.5
Office of Institutional Assurance and Integrity	7.0						7.0
Project Management Office	2.0						2.0
Security & Emergency Services	14.0						14.0
Environment, Health & Safety	99.3						99.3
Facilities	152.0		11.2				163.2
Human Resources	64.2						64.2
IT Division	81.9						81.9
Office of the CFO	55.4		79.9	4.4			139.7
Engineering	8.1						8.1
Earth Sciences	0.1						0.1
General Lab	4.0						4.0
UC Management Costs						1.8	1.8
TOTAL	610.8	106.7	91.1	4.4	8.6	1.8	823.4

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)

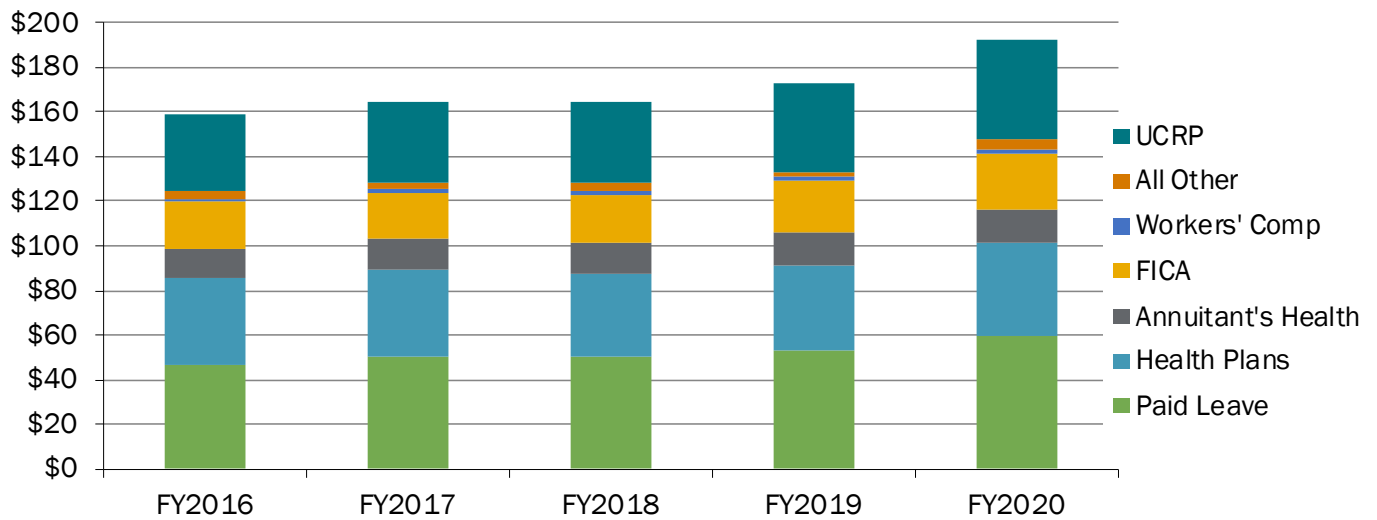
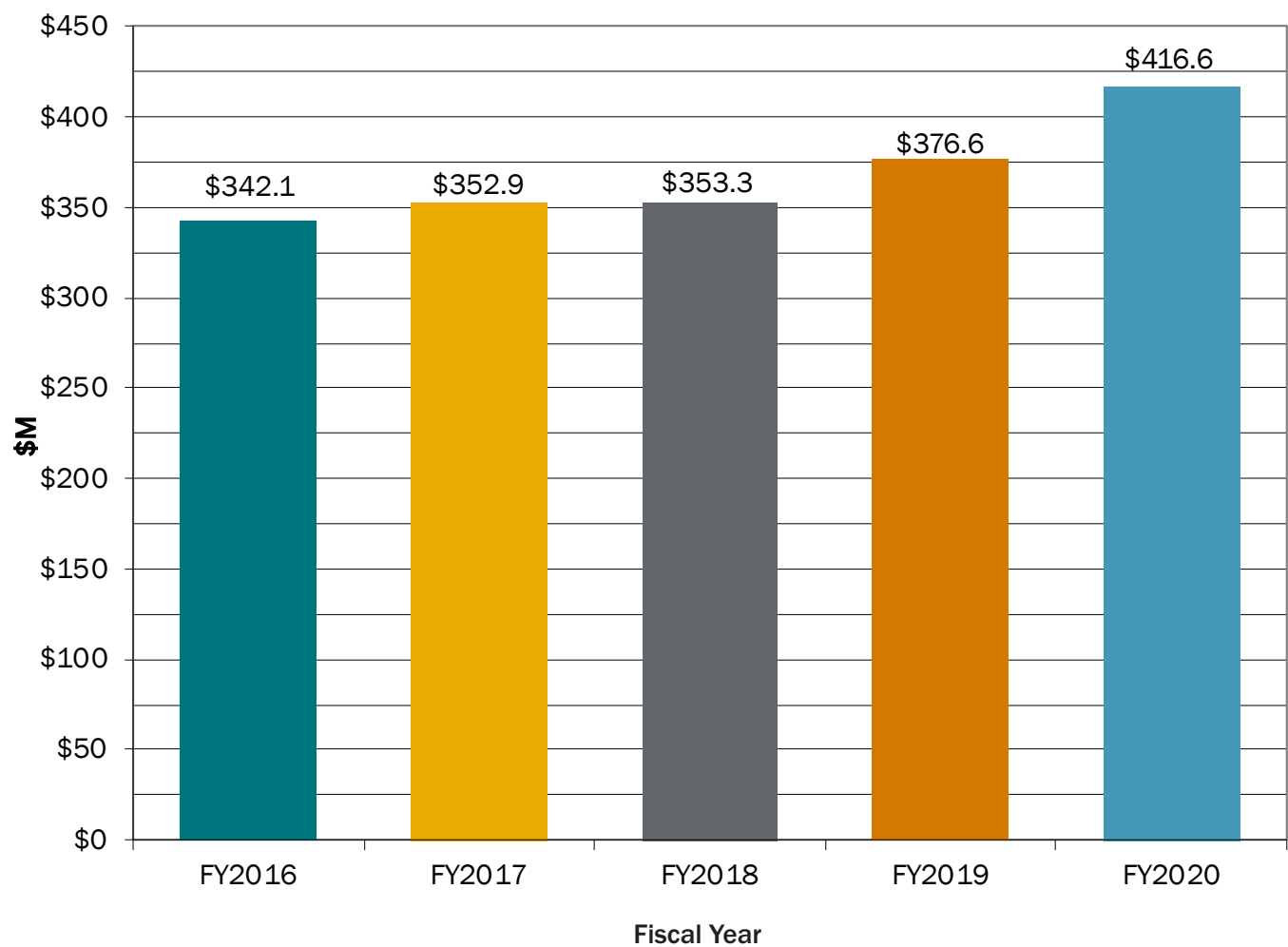


Figure 3.4

Gross Payroll Summary (\$M)



Area and Organizational Burden Costs and FTEs

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

Area and Division Cost Pools	FY2020	
	Cost \$K	Avg FTE
Biosciences	12,621	74.1
Computing Sciences	8,459	38.9
Computational Research	2,764	11.3
Computing Sciences Area	3,894	16.2
National Energy Research Scientific Computing Center	1,294	7.6
Scientific Networking	506	3.8
Earth & Environmental Sciences	5,167	22.4
Energy Sciences	10,648	47.2
Advanced Light Source	2,688	10.8
Chemical Sciences	2,329	11.3
Energy Sciences Area	1,091	2.9
Materials Sciences	2,745	12.5
Molecular Foundry	1,795	9.6
Energy Technologies Area	8,295	35.1
Physical Sciences	11,800	54.9
Accelerator Technology & Applied Physics	1,715	8.8
Engineering	5,841	25.2
Nuclear Science	1,826	8.9
Physical Sciences Area	612	2.0
Physics	1,805	10.0
Directorate & Operations	9,648	38.5
Facilities	4,881	19.5
Information Technology	3,236	12.4
Projects and Infrastructure Modernization	1,530	6.6
TOTAL	66,637	311.1
Note: Minor Variances may occur due to rounding.		

Service Center Costs and FTEs by Area and Division

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

Area and Division (a)	FY2020	
	Cost \$K	Avg FTE
Biosciences Area	546	3.5
Biological Systems & Energy	1,958	6.8
Computing Sciences Area	3,223	-
Earth & Environmental Science Area	23	0.1
ETA Area Office	3,305	21.2
Energy Geosciences	30	0.1
Engineering	1,929	7.8
Facilities	8,595	2.2
Human Resources (b)	4,882	-
Information Technology	9,182	27.1
Joint Genome Institute	1,881	0.4
Laboratory Directorate	1,311	4.9
Materials Sciences	453	1.6
Molecular Biophysics & Integrated Bioimaging	1,324	5.9
Nuclear Science	389	1.2
Office of the CFO	208	0.3
Total	39,241	83.0
Note: Minor Variances may occur due to rounding. (a) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only and GSRA pass through costs. (b) Includes: GSRA pass through costs.		

Distributed Recharges by Resource Category Trends, FY2016-FY2020 (\$K)

Distributed Recharge (a, b)	FY2016	FY2017	FY2018	FY2019	FY2020
Vehicle	875	883	938	928	860
MSD Facility	272	259	141	90	80
Animal Care	657	605	532	495	511
Creative Services	955	1,040	926	996	901
FAM Facility Recharge	57	41	32	16	0
ESD Sample Analysis Recharge	111	82	68	62	20
Warehouse Storage Recharge	90	98	217	169	186
88-Inch Accelerator Operations	1,185	1,065	862	1,363	447
JBEI Non-Material Recharge	869	775	640	776	702
JBEI Material Recharge	5,280	5,477	5,518	1,618	1,134
BCSB	1,445	1,258	1,300	1,986	1,324
Telephone Services	5,592	5,108	5,475	5,953	6,455
ETA Recharge	2,687	2,787	2,808	3,060	3,169
Computer/Net Recharges	1,463	1,473	1,448	1,787	1,955
Flexlab Recharge	204	303	210	249	202
Engineering Shop	606	622	745	888	801
CAD	739	669	901	1,075	1,254
ALS Proprietary Recharge	868	774	947	831	643
JGI Production Sequencing	38	84	56	36	-
NERSC Sponsored Storage Recharge	569	220	372	-	-
Scientific Networking	3,250	3,492	3,338	3,737	2,489
CRT HPC Recharge	3,612	3,387	3,792	4,073	3,223
JGI Occupancy Labor Recharge	132	151	150	119	-
JGI Occupancy Material Recharge	4,231	4,275	3,716	3,549	1,613
Electricity	9,427	8,820	9,816	9,360	7,919
Sustainability Recharge	580	921	1,304	1,421	1,229
GSRA - Material Recharge	3,397	3,491	3,959	4,641	4,942
Applied Nuclear Physics Recharge			215	358	321
EGD TOUGH Code Recharge				28	30
CXRO Recharge					378
SDL Recharge					72
Total Recharges	49,192	48,161	50,423	49,662	42,859

Note: Minor variances may occur due to rounding.

(a) Includes recharges credited back to direct operating accounts such as ALS, ESnet, JGI, etc.

(b) Does not include Procurement and Travel recharges.

FINANCIAL STATEMENT

4

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

	FY2020	FY2019
ASSETS:		
Current Assets		
Cash	6,199	5,037
Accounts Receivable	31,997	31,841
Inventories	381	353
Other Current Assets	748	2,655
Total Current Assets	39,325	39,886
Net Plant & Equipment	892,544	790,816
TOTAL ASSETS	931,869	830,702
LIABILITIES AND EQUITY:		
Liabilities		
Current Liabilities		
Drafts Payable	4,861	4,341
Accounts Payable	24,179	18,107
Accounts Payable - Payroll	47,031	-
Inter/Intra DOE Payable	961	1,001
Accrued Expenses	123,333	111,045
Capital Lease Liability - Current	258	249
Unearned Revenues	69,659	59,704
Other	109	108
Total Current Liabilities	270,391	194,555
Environmental Liabilities	1,106,261	1,122,927
Capital Lease Liability - Noncurrent	782	1,040
Post-Retirement Benefits (Note 2)	695,900	730,509
Pension Plan Liability (Note 2)	2,135,795	1,682,014
Total Liabilities	4,209,129	3,731,045
Equity		
Beginning Equity	(2,900,343)	(2,071,785)
Change in Equity (Note 2)	(376,917)	(828,558)
Ending Equity	(3,277,260)	(2,900,343)
TOTAL LIABILITIES AND EQUITY	931,869	830,702
See accompanying Note 1: Summary of Significant Accounting Policies on pages 55-56. Note 2 can be found on page 57.		

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), 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 executed on November 1, 2019 for a three-year term and may be extended for two additional periods of one year each through October 31, 2024.

Cash

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

Accounts Receivable

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

Inventories

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

continued

Note 1: Summary of Significant Accounting Policies

Other Current Assets

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

Net Plant and Equipment

Plant and equipment are purchased, constructed, or fabricated in-house and include major modifications or improvements. The capitalization threshold is \$500K for items with an anticipated service life of two years or more. Plant and equipment items meeting these criteria are capitalized. Costs of construction and fabrication are capitalizable expenses and are recorded initially as construction/fabrication work in process. Upon in-service or occupancy, 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

Current liabilities include drafts payable, accounts payable, inter/intra DOE payable, and accrued expenses (including 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.

Accounts payable - payroll represents the amount due to University of California for the payroll outlay on behalf of the Laboratory. As of July 2020, UCPath (University of California system-wide HR application for payroll, employee benefits and other transactions) was implemented at the Laboratory.

Long term liabilities include the long-term portion of capital lease liabilities and environmental liabilities. Environmental liabilities include future clean up, restoration activities, and Environment, Health & Safety (EH&S) 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: FY2020 Year-End Adjustments

DOE made adjustments to record FY2020 Post-Retirement Benefit and Pension Plan obligations. These amounts are reflected in the Laboratory's actuals for October 2020. These adjustments are the result of coordination and approval by both DOE and UC.

The adjustment for the Pension Plan is primarily due to a lower discount rate (from 3% in 2019 to 2.5% in 2020) resulting in a higher obligation.

The adjustment for the Post Retirement Plan that resulted in a lower obligation is primarily due to lower medical plan costs and changes to the medical, dental, and mortality trend rates offset by the lower discount rate.

The following is the adjusted balance sheet for FY2020:

	Adjusted Balance Sheet (\$K)		
	FY2020	YE Adjustments	Adjusted FY2020
ASSETS:			
Current Assets			
Cash	6,199		6,199
Accounts Receivable	31,997		31,997
Inventories	381		381
Other Current Assets	748		748
Total Current Assets	39,325		39,325
Net Plant & Equipment	892,544		892,544
TOTAL ASSETS	931,869		931,869
LIABILITIES AND EQUITY:			
Liabilities			
Current Liabilities			
Drafts Payable	4,861		4,861
Accounts Payable	24,179		24,179
Accounts Payable - Payroll	47,031		47,031
Inter/Intra DOE Payable	961		961
Accrued Expenses	123,333		123,333
Capital Lease Liability - Current	258		258
Unearned Revenues	69,659		69,659
Other	109		109
Total Current Liabilities	270,391		270,391
Environmental Liabilities	1,106,261		1,106,261
Capital Lease Liability - Noncurrent	782		782
Post-Retirement Benefits	730,509	(34,609)	695,900
Pension Plan Liability	1,682,014	453,781	2,135,795
TOTAL LIABILITIES	3,789,957	419,172	4,209,129
EQUITY:			
Beginning Equity	(2,900,343)		(2,900,343)
Change in Equity	42,255	(419,172)	(376,917)
ENDING EQUITY	(2,858,088)	(419,172)	(3,277,260)
TOTAL LIABILITIES AND EQUITY	931,869	-	931,869

Note 2: FY2019 Year-End Adjustments

DOE made adjustments to record FY2019 Post-Retirement Benefit and Pension Plan obligations. These amounts are reflected in the Laboratory's actuals for October 2019. These adjustments are the result of coordination and approval by both DOE and UC. The adjustments this year are primarily due to a lower discount rate (from 4% in 2018 to 3% in 2019) resulting in higher obligations.

The following is the adjusted balance sheet for FY2019:

	Adjusted Balance Sheet (\$K)		
	FY2019	YE Adjustments	Adjusted FY2019
ASSETS:			
Current Assets			
Cash	5,037		5,037
Accounts Receivable	31,841		31,841
Inventories	353		353
Other Current Assets	2,655		2,655
Total Current Assets	39,886		39,886
Net Plant & Equipment	790,816		790,816
TOTAL ASSETS	830,702		830,702
LIABILITIES AND EQUITY:			
Liabilities			
Current Liabilities			
Drafts Payable	4,341		4,341
Accounts Payable	18,107		18,107
Inter/Intra DOE Payable	1,001		1,001
Accrued Expenses	111,045		111,045
Capital Lease Liability - Current	249		249
Unearned Revenues	59,704		59,704
Other	108		108
Total Current Liabilities	194,555		194,555
Environmental Liabilities	1,122,927		1,122,927
Capital Lease Liability - Noncurrent	1,040		1,040
Post-Retirement Benefits	630,424	100,085	730,509
Pension Plan Liability	1,000,083	681,931	1,682,014
TOTAL LIABILITIES	2,949,029	782,016	3,731,045
EQUITY:			
Beginning Equity	(2,071,785)		(2,071,785)
Change in Equity	(46,542)	(782,016)	(828,558)
ENDING EQUITY	(2,118,327)	(782,016)	(2,900,343)
TOTAL LIABILITIES AND EQUITY	830,702	0	830,702

PROCUREMENT & PROPERTY MANAGEMENT

5

Table 5.1

Purchases Placed Using Purchase Orders/Subcontracts

Total POs	(\$K)	# Actions
\$0 - \$25,000	\$58,701	50,995
\$25,001 - \$150,000	\$100,583	1,588
\$150,001- \$1,000,000	\$140,580	459
\$1,000,001 +	\$177,447	55
Total	\$477,311	53,097

Table 5.2

Procurement Purchase Order Dollar Amount by Area

Division	PO (\$K)
Directorate & Operations	\$214,576
Computing Sciences	\$64,418
Biosciences	\$50,108
Energy Sciences	\$49,510
Physical Sciences	\$44,182
Energy Technologies	\$29,327
Earth & Environmental Sciences	\$25,190
Total	\$477,311

Figure 5.1

Procurement Obligations by Channel (\$K)

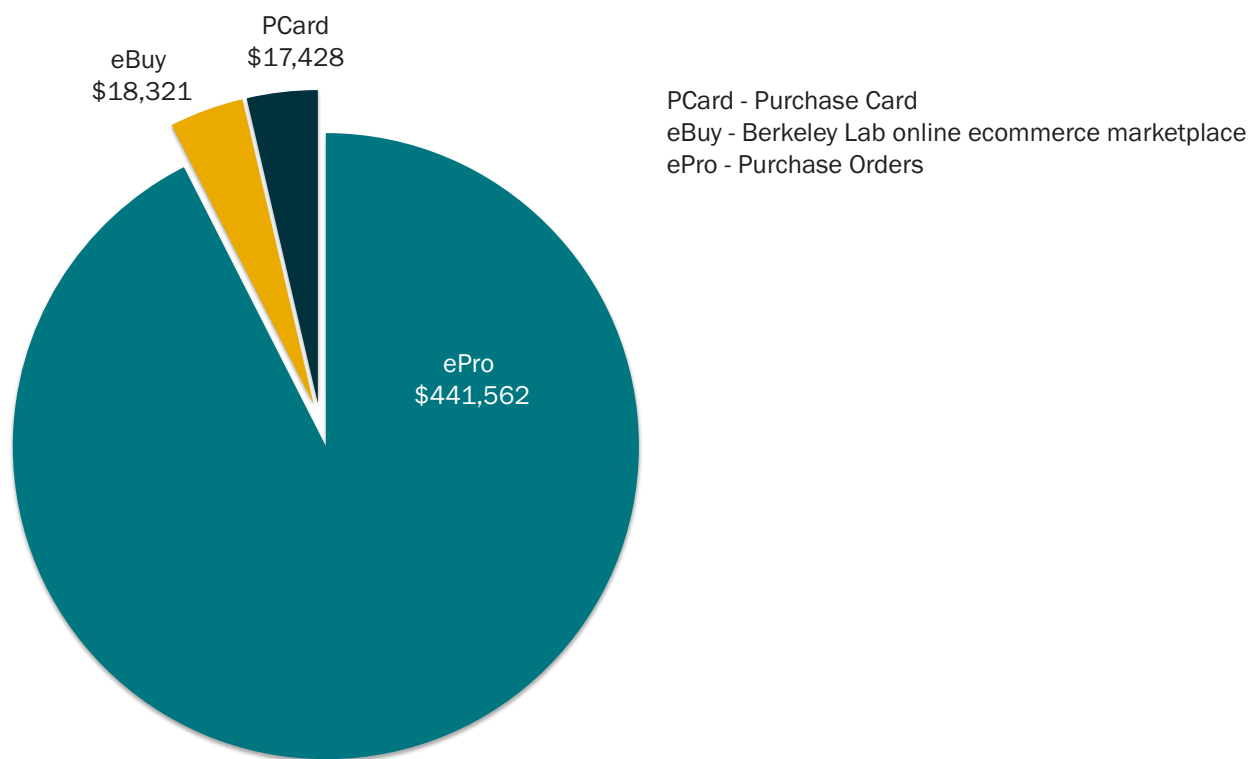
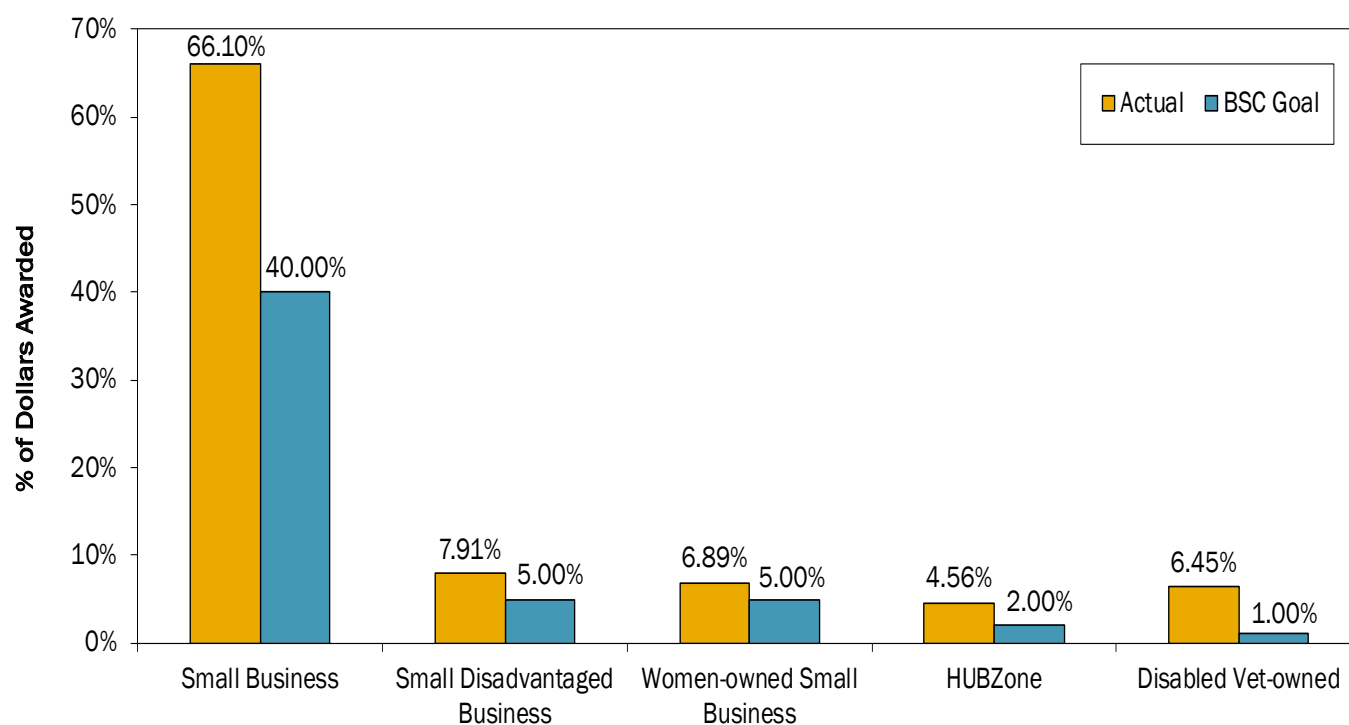


Figure 5.2

Laboratory Supplier Socioeconomic Performance



Cycle Time for Purchase Orders ≤\$25K — Subcontracting Groups FY2020

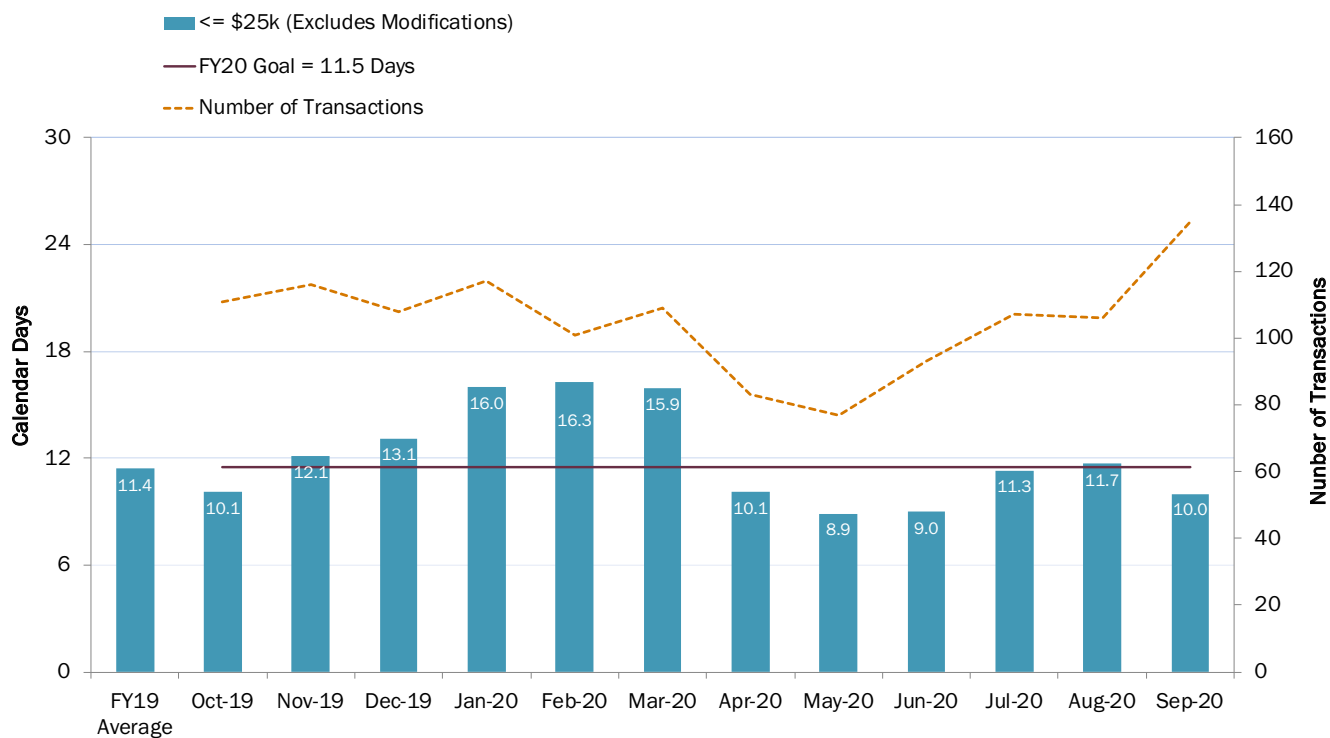
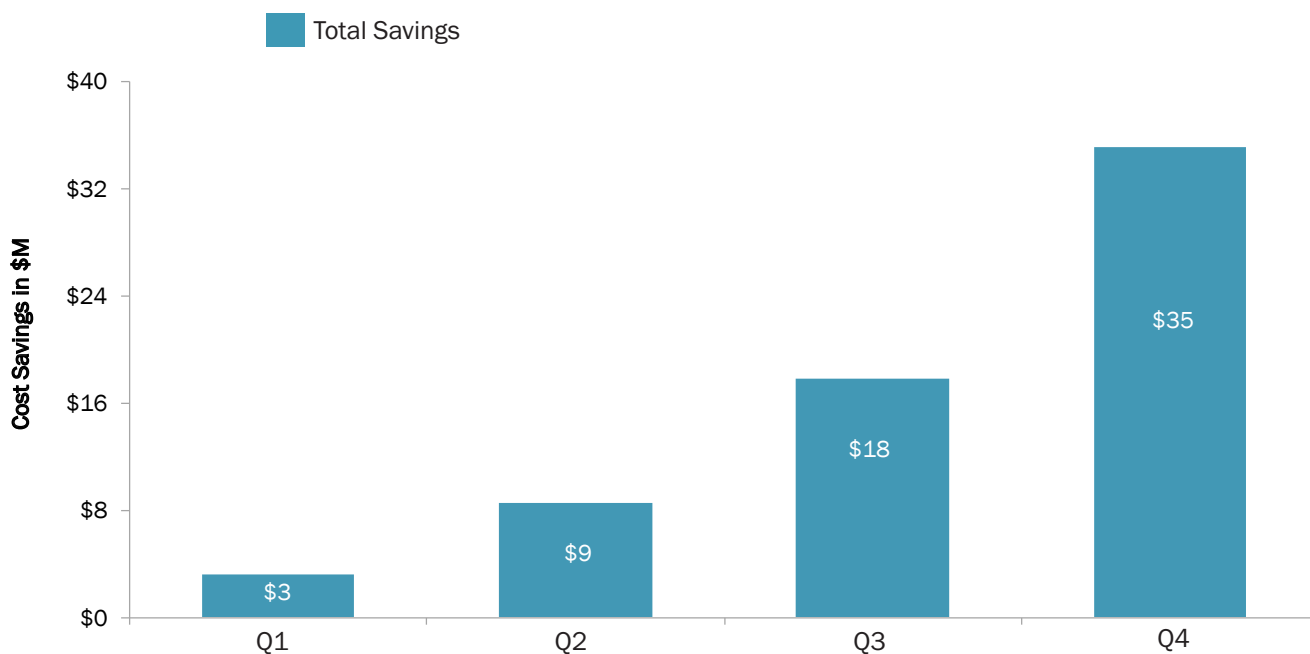


Figure 5.4

Procurement Cost Savings (\$M)



Note: Procurement cost savings are based on buyers negotiating with suppliers utilizing the following DOE-approved methods: previous price paid, negotiated savings, independent cost estimate, supplier rebates, leveraged buying/volume discounts, increased value of procurement, prompt pay discount, or cost sharing.

Table 5.3

Property Management Activity

Asset Category	# of Assets	Acquisition Value (\$K)	
Equipment	7,073	730,466	
Attractive	19,046	292,429	
High Risk	26	68,079	
Totals Lab-wide	26,145	1,090,974	
Subset of Attractive Assets			
Computers Laptops	7,981	15,372	
Computer Desktops	6,239	13,037	
Tablets	1,360	68,079	
Subset Total	15,580	96,487	
Inventory Campaign	Number of Assets Per Inventory Campaign	Positive Resolutions Per Inventory Campaign	% Positive
Attractive	15,492	13,840	89.34%
Controlled	1,862	1,519	81.58%
High Risk	23	22	96%
Final Results	17,377	15,381	88.51%
Validation Size	No validation required in FY2020	No validation required in FY2020	0%
Assets Scanned	12,113	17,377	69.71%
Area and Division	Total Assets for Area and Division	Acquisition Value for Area and Division (\$K)	
BIOSCIENCES			
Biological Systems & Energy	1,247	25,204	
Bioscience Area Office	853	23,952	
Environmental Genomics & System Biology	424	5,353	
Joint Genome Institute	915	15,898	
Molecular Biophysics & Integrated Bioimaging	778	21,723	
ALD Totals	4,217	92,131	
COMPUTING SCIENCES			
Computing Sciences ALD	137	683	
Computational Research	969	3,300	
National Energy Research Scientific Computing	1,104	105,709	
Scientific Networking	807	23,152	
ALD Totals	3,017	132,844	

continued

Property Management Activity

Area and Division	Total Assets for Area and Division	Acquisition Value for Area and Division (\$K)	
DIRECTORATE & OPERATIONS			
Office of the CFO	245	424	
Environment, Health, Safety & Security	338	2,693	
Excess	11	721	
Facilities	748	4,451	
Human Resources	249	237	
Information Technology	2,759	22,370	
Laboratory Directorate	214	315	
Operations	29	36	
Projects and Infrastructure Modernization	88	722	
Security & Emergency Services	173	2,152	
ALD Totals	4,854	34,121	
EARTH & ENVIRONMENTAL SCIENCES			
Earth & Environmental Science ALD	359	1,601	
Climate & Ecosystems	651	8,424	
Energy Geosciences	745	12,377	
ALD Totals	1,755	22,403	
ENERGY SCIENCES			
Energy Sciences ALD	17	26	
Advanced Light Source	1,860	249,691	
Chemical Sciences	1,354	40,896	
Molecular Foundry	1,276	84,947	
Material Sciences	1,549	58,104	
ALS-U Upgrade	58	661	
ALD Totals	6,114	434,325	
ENERGY TECHNOLOGIES			
Energy Technologies Area Office	113	174	
Building Technology and Urban Systems	566	4,800	
Cyclotron Road	40	389	
Energy Analysis Environmental Impact	647	7,697	
Energy Storage & Distribution	891	16,253	
ALD Totals	2,257	29,313	
PHYSICAL SCIENCES			
Accelerator Technology & Applied Physics	1,075	97,166	
Engineering	1,039	15,738	
Nuclear Science	877	83,971	
Physics	940	148,963	
ALD Totals	3,931	345,837	
TOTALS LAB-WIDE	26,145	1,090,974	

ACRONYMS & KEY TERMS

6

Acronyms and Key Terms

ALD	Associate Lab Director
ALS	Advanced Light Source
ALS-U	Advanced Light Source Upgrade
AMO	Advance Manufacturing Office
ARPA-E	Advanced Research Projects Agency-Energy
ASCR	Advanced Scientific Computing Research
B&R	Budget and Reporting
BA	Budget Authority
BASO	Bay Area Site Office
BCSB	Berkeley Center for Structural Biology
BELLA	Berkeley Lab Laser Accelerator
BER	Biological & Environmental Research
BES	Basic Energy Sciences
BioEPIC	Biological and Environmental Program Integration Center
CAD	Computer Aided Design
CAS	Cost Accounting Standards
CD	Critical Decision
CFO	Chief Financial Officer
COVID-19	Coronavirus Disease 2019
CRADA	Cooperative Research and Development Agreement
CRT	Computational Research and Theory Facility
CSR	Contractor Supported Research
CXRO	Center for X-ray Optics
DESI	Dark Energy Spectroscopic Instrument
DNN	Defence Nuclear Nonproliferation
DOE	Department of Energy
eBuy	Berkeley Lab's Online Marketplace
EERE	Energy Efficiency and Renewable Energy
EGD	Energy Geosciences Division
EH&S	Environment/Health/Safety
ePro	Berkeley Lab Purchase Orders
EPSA	Energy Policy System Analysis
ESD	Earth Sciences Division
ESnet	Energy Sciences Network
ETA	Energy Technologies Area
FAM	Facility Advanced Microscopy
FTE	Full-Time Equivalent
FY	Fiscal Year (October 1 through September 30)

Acronyms and Key Terms Continued

G&A	General and Administrative
GAAP	Generally Accepted Accounting Principles
GSRA	Graduate Student Research Assistant
HEP	High Energy Physics
HPC	High Performance Computing
HUBZone	Historically Under-utilized Business Zone
ICR	Institutional Cost Report
IEWO	Inter-Entity Work Orders
IGPP	Institutional General Plant Project
IJE	Inter-Jurisdictional Employee Exchange
ILA	Inter-Location Appointment
IPA	Inter-Governmental Personnel Assignment
IT	Information Technology
JBEI	Joint BioEnergy Institute
JGI	Joint Genome Institute
LBL	Lawrence Berkeley National Laboratory
LDRD	Laboratory Directed Research and Development
LUX-ZEPLIN	Large Underground Xenon-ZonEd Proportional scintillation in Liquid Noble gases
M&O	Management & Operating
MLA	Multiple Location Appointment
MSD	Materials Sciences Division
NAWI	National Alliance for Water Innovation
NERSC	National Energy Research Scientific Computing Center
NIAID	National Institute of Allergy and Infectious Diseases
NIH	National Institutes of Health
NNSA	National Nuclear Security Agency
NPO	Nonprofit Organization
OCFO	Office of the Chief Financial Officer
OHRCH	Overhead Recharge
PCard	Purchase Card
PLF	Paid Leave Factor
R&D	Research and Development
RD&T	Research, Development, and Technology

Acronyms and Key Terms Continued

S&S	Safeguard & Security
SDL	Semiconductor Detector Laboratory
SLI	Science Laboratories Infrastructure
SPP	Sponsored Partnership Projects
SPSA	Strategic Planning Support Activities
TCR	Transcription-Coupled Repair
TOUGH	Transport of Unsaturated Groundwater and Heat
UC	University of California
UCOP	University of California Office of the President
UCPath	University of California system-wide HR application for payroll, employee benefits and other transactions
UCRP	University of California Retirement Plan
UNFD	Used Nuclear Fuel Disposition
WFB	Wells Fargo Bank

Key Terms

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

Disclaimer

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