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Lawrence Berkeley National Laboratory **2015 Annual Financial Report**





Lawrence Berkeley National Laboratory

2015 Annual Financial Report

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

February 2016





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Lawrence Berkeley National Laboratory is an internationally renowned institution dedicated to addressing the world's most urgent scientific challenges, from advancing sustainable energy and protecting human health to revealing the origins and fate of the universe. As the original home of "team science," which emphasizes interdisciplinary

research in the public interest, Berkeley Lab's scientific expertise has been recognized with 13 Nobel Prizes. The University of California has managed the Lab on behalf of the U.S. Department of Energy (DOE) since its founding in 1931.



 $5 \\ \text{financial results reflect a year of significant scientific, operational and financial}$ achievement for Lawrence Berkeley National Laboratory. Complementing many scientific accomplishments, Berkeley Lab completed construction of four new research facilities: the General Purpose Laboratory, Chu Hall, Wang Hall and the Flexlab Building Efficiency Testbed. These state-ofthe-art facilities allow for program growth and enhanced collaboration, in part by enabling programs to return to the Lab's Hill Campus from offsite locations. Detailed planning began for the new Integrative Genomics Building (IGB) that will house another major program currently located offsite. Existing site infrastructure was another key focus area. The Lab prioritized and increased investments in deferred maintenance in alignment with the Berkeley Lab Infrastructure Plan, which was developed under the leadership of the DOE Office of Science. With the expiration of American Recovery and Reinvestment Act (ARRA) funds, we completed the close-out of all of our 134 ARRA projects, recording total costs of \$331M over the FY2009-2015 period.

The key FY2015 financial challenge required a triple play to balance opportunity and risk-based investments with effective operational mission support, while remaining cost competitive. Berkeley Lab received a total of \$798M in new FY2015 funding, a 1.7 percent increase over FY2014. Total FY2015 spending was \$811M, an increase of 3.4 percent from FY2015 spending. As in FY2014, the indirect-funded Operations units worked with constrained budgets in order to yield more funding for strategic needs. Given limited funding growth, thoughtful tradeoffs were essential. A new Indirect Advisory Group (IAG) chartered by the Lab Director brought together scientific and operations leaders to jointly weigh tradeoffs and impacts. The IAG was instrumental in helping prioritize and shape our financial strategy, and we look forward to ongoing collaboration in FY2016. Berkeley Lab ended FY2015 with a small increase in funding, a slightly greater increase in costs, and a financial strategy informed by mission needs that effectively balanced strategic investments, essential operational support, and cost competitiveness.

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

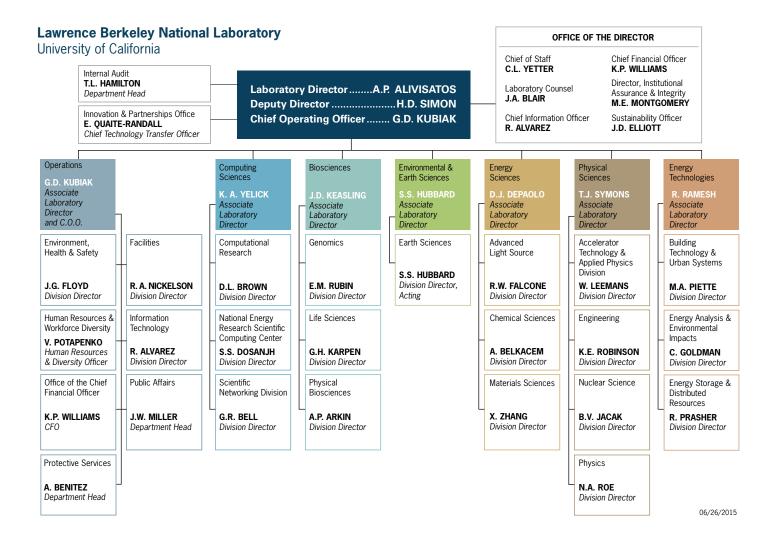
Within the Office of the Chief Financial Officer (OCFO), we focused on stabilizing and leveraging our new systems; expanding our electronic commerce program; completing reorganizations for improved service delivery; implementing innovative cost savings initiatives, and refreshing the OCFO Strategic Roadmap. The new financial management and electronic sponsored research administration systems (FMS and eSRA), launched at the beginning of FY2015, operated well and were largely stabilized by yearend, thanks to the collective efforts of everyone in the OCFO, and our colleagues in the Information Technology Division and across the Lab. Our Procurement organization led the successful implementation of a new electronic commerce platform, serving as the lead Department of

Energy Office of Science laboratory in the pilot. Working very closely with the University of California Office of National Laboratories (UCNL), we secured a reduction in Berkeley Lab's retirement plan costs for the next five years (FY2016 to FY2020) with no change to existing employee plan benefits. Within the OCFO, we made significant progress on our strategic planning process, engaging all OCFO managers and staff to harvest the best ideas for our future roadmap. All in all, FY2015 was a very successful year for Berkeley Lab and the OCFO!

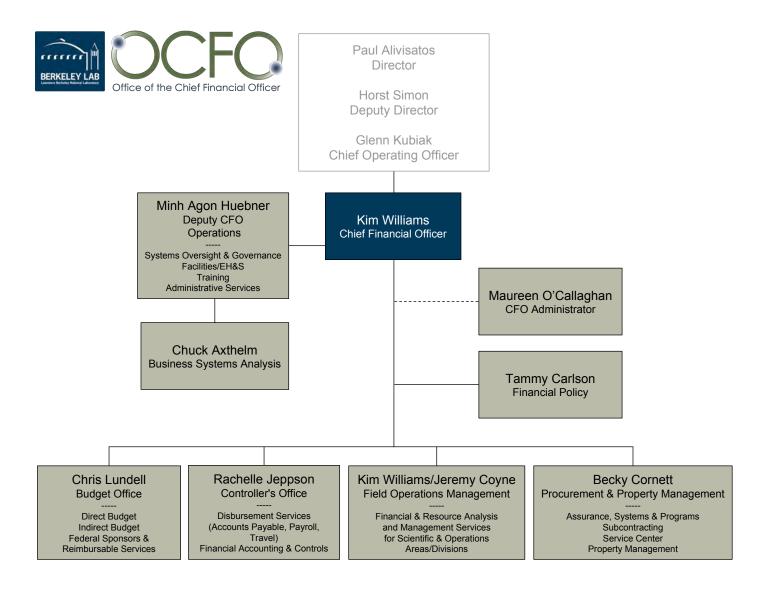
Kim Williams Chief Financial Officer



Lawrence Berkeley National Laboratory (LBNL), University of California



Office of the Chief Financial Officer



1. INSTITUTIONAL INFORMATION



Figure 1.1

Where Did Your Program Dollars Go in FY2015?

| Expenses | DOE Operating Costs | DOE Integrated Contractors Costs | Construction and Equipment | Non-DOE |
|-----------------------------|------------------------|-------------------------------------|----------------------------|---------|
| DIRECT | ' | | ' | |
| Direct Labor | | | | |
| Labor (a) | \$0.33 | \$0.40 | \$0.35 | \$0.37 |
| Contract Labor | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Organization/ALD Burden (b) | \$0.05 | \$0.07 | \$0.06 | \$0.08 |
| Subtotal Direct Labor | \$0.38 | \$0.47 | \$0.42 | \$0.45 |
| OTHER DIRECT | | | | |
| Services | \$0.20 | \$0.13 | \$0.24 | \$0.10 |
| Materials | \$0.11 | \$0.06 | \$0.17 | \$0.05 |
| Utilities | \$0.01 | \$0.00 | \$0.00 | \$0.01 |
| Other Expenses (c) | \$0.01 | \$0.00 | \$0.00 | \$0.02 |
| Recharges (b,d) | \$0.02 | \$0.08 | \$0.01 | \$0.05 |
| Travel | \$0.01 | \$0.01 | \$0.01 | \$0.01 |
| Subtotal Other Direct | \$0.36 | \$0.29 | \$0.43 | \$0.24 |
| Total Direct | \$0.75 | \$0.76 | \$0.84 | \$0.68 |
| INDIRECT | · | | | |
| Procurement | \$0.01 | \$0.02 | \$0.02 | \$0.01 |
| Travel | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| G&A (Other Inst.) | \$0.24 | \$0.23 | \$0.13 | \$0.31 |
| Total Indirect | \$0.25 | \$0.24 | \$0.16 | \$0.32 |
| TOTAL EXPENSES | \$1.00 | \$1.00 | \$1.00 | \$1.00 |

Note: Minor variances may occur due to rounding.

- (a) Labor includes salary and benefits for Scientists/Engineers, Admin., Students/GSRA's and Campus Labor.
- (b) Distributed activities used by direct funded programs.
- (c) Includes misc. expenses (stipends, sales tax, freight, etc.).
- (d) Includes recharges credited back to direct operating accounts such as ALS and ESnet.

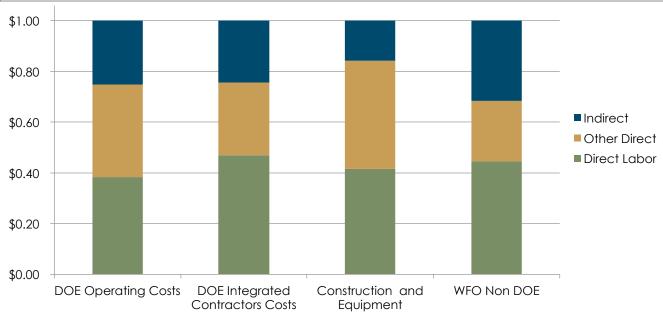


Table 1.1

Cost Trends by Expense Category, FY2011-FY2015 (\$M and % of Total)

| | FY2 | 011 | FY2 | 012 | FY20 | 013 | FY2 | 014 | FY20 | 015 |
|-----------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| Expenses | \$M | % |
| DIRECT | | | | | | | | | | |
| DIRECT LABOR | | | | | | | | | | |
| Labor (a) | 264.3 | 31.6% | 271.5 | 33.1% | 273.2 | 33.4% | 274.8 | 35.0% | 277.4 | 34.2% |
| Contract Labor | 1.1 | 0.1% | 0.8 | 0.1% | 0.7 | 0.1% | 0.4 | 0.0% | 0.4 | 0.0% |
| Organization/ALD Burden (b) | 40.0 | 4.8% | 41.3 | 5.0% | 42.4 | 5.2% | 42.4 | 5.4% | 42.8 | 5.3% |
| Subtotal Direct Labor | 305.5 | 36.5% | 313.6 | 38.3% | 316.4 | 38.6% | 317.6 | 40.5% | 320.5 | 39.5% |
| OTHER DIRECT | | | | | | | | | | |
| Services | 213.6 | 25.5% | 182.6 | 22.3% | 183.3 | 22.4% | 150.8 | 19.2% | 150.2 | 18.5% |
| Materials | 86.6 | 10.4% | 88.9 | 10.9% | 79.0 | 9.6% | 71.1 | 9.1% | 82.6 | 10.2% |
| Utilities | 10.8 | 1.3% | 8.4 | 1.0% | 7.8 | 1.0% | 9.2 | 1.2% | 9.6 | 1.2% |
| Other Expenses (c) | 5.6 | 0.7% | 5.7 | 0.7% | 3.4 | 0.4% | 3.6 | 0.5% | 5.7 | 0.7% |
| Recharges (b,d) | 15.6 | 1.9% | 20.3 | 2.5% | 22.8 | 2.8% | 23.4 | 3.0% | 21.9 | 2.7% |
| Travel | 12.9 | 1.5% | 13.1 | 1.6% | 12.5 | 1.5% | 12.2 | 1.6% | 11.8 | 1.5% |
| Subtotal Other Direct | 345.1 | 41.3% | 319.0 | 38.9% | 308.8 | 37.7% | 270.2 | 34.4% | 281.8 | 34.7% |
| Total Direct | 650.5 | 77.8% | 632.6 | 77.2% | 625.2 | 76.3% | 587.8 | 74.9% | 602.3 | 74.2% |
| INDIRECT | | | | | | | | | | |
| Procurement | 8.3 | 1.0% | 8.6 | 1.1% | 9.3 | 1.1% | 8.5 | 1.1% | 9.2 | 1.1% |
| Travel | 1.6 | 0.2% | 1.9 | 0.2% | 1.4 | 0.2% | 1.3 | 0.2% | 0.9 | 0.1% |
| G&A (Other Inst.) | 175.7 | 21.0% | 176.0 | 21.5% | 183.3 | 22.4% | 187.3 | 23.9% | 198.9 | 24.5% |
| Total Indirect | 185.6 | 22.2% | 186.5 | 22.8% | 194.1 | 23.7% | 197.1 | 25.1% | 209.0 | 25.8% |
| TOTAL EXPENSES | 836.1 | 100.0% | 819.1 | 100.0% | 819.2 | 100.0% | 784.9 | 100.0% | 811.3 | 100.0% |

Note: Minor variances may occur due to rounding.

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

⁽b) Distributed activities used by direct funded programs.

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

⁽d) Includes recharges credited back to direct operating accounts such as ALS and ESnet.



Table 1.2

Direct Cost Trends by Division, FY2011 - FY2015 (\$K)

| Division | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 |
|--|----------------|----------------|---------|---------|---------|
| Accelerator Technology & Applied Physics | 52,669 | 43,585 | 31,520 | 28,562 | 32,470 |
| Advanced Light Source | 63,453 | 70,357 | 74,850 | 69,647 | 60,233 |
| Chemical Sciences | 17,965 | 17,979 | 22,298 | 27,281 | 24,737 |
| Computing Sciences (a) | 143,316 | 125,749 | 139,536 | 134,324 | |
| Computational Research (a) | | | | | 32,171 |
| National Energy Research Scientific Computing Center (a) | | | | | 93,768 |
| Scientific Networking (a) | | | | | 41,189 |
| Energy Technologies | 102,721 | 107,006 | 103,779 | 107,543 | 106,834 |
| Engineering | 4,014 | 3,524 | 4,934 | 5,151 | 4,549 |
| EH&S | 2,504 | 3,360 | 1,518 | 51 | 34 |
| Earth Sciences | 55,550 | 55,399 | 57,319 | 58,125 | 64,683 |
| Facilities | 36,450 | 37,843 | 36,455 | 11,571 | 9,323 |
| Genomics | 6,360 | 5,951 | 7,419 | 7,036 | 7,963 |
| Genomics - JGI | 67,023 | 72,055 | 67,646 | 71,014 | 73,127 |
| Information Technology | 3,570 | 2,781 | 2,081 | 2,550 | 2,306 |
| Life Sciences | 59,118 | 49,384 | 41,123 | 34,852 | 30,132 |
| Materials Sciences | 76,397 | 81,551 | 78,309 | 78,034 | 72,860 |
| Nuclear Science | 37,753 | 38,809 | 37,193 | 32,397 | 33,439 |
| Physical Biosciences | 65,928 | 61,986 | 62,076 | 62,787 | 63,680 |
| Physics | 40,219 | 40,633 | 48,283 | 48,773 | 52,409 |
| Protective Services | - | - | 1,442 | 3,860 | 3,670 |
| Lab Directorate/Other | 991 | 1,088 | 1,394 | 1,310 | 1,595 |
| Other | 92 | 52 | 64 | 51 | 106 |
| Division Total | 836,095 | 819,093 | 819,242 | 784,917 | 811,276 |
| (a) Computing Sciences broken out into CR, SN, and NERSC i | n FY2015 total | ling 167,128 (| \$K). | | |

Table 1.2a

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

| | | | | FY2015 | | | |
|---|------------------|---|---------|-----------------|-----------------------|-----------------------|---------|
| Division | DOE Operating | DOE Integrated Contractors Costs | Federal | Non- Federal | Operating Subtotal | Capital and Equipment | Total |
| Accelerator Technology & Applied Physics | 18,067 | 7,209 | - | 948 | 26,223 | 6,247 | 32,470 |
| Advanced Light Source | 53,892 | 623 | 6 | 1,536 | 56,056 | 4,177 | 60,233 |
| Chemical Sciences | 23,949 | 33 | 151 | 605 | 24,737 | - | 24,737 |
| Computational Research (a) | 29,272 | 430 | 2,199 | 270 | 32,171 | - | 32,171 |
| National Energy Research Scientific Computing Center (a) | 93,758 | 9 | - | - | 93,768 | - | 93,768 |
| Scientific Networking (a) | 38,682 | 2,428 | 26 | 53 | 41,189 | - | 41,189 |
| Energy Technologies | 80,840 | 1,051 | 10,436 | 13,623 | 105,950 | 884 | 106,834 |
| Engineering | - | 1,567 | 443 | 2,390 | 4,401 | 148 | 4,549 |
| EH&S | 34 | - | - | - | 34 | - | 34 |
| Earth Sciences | 48,624 | 3,988 | 1,955 | 9,358 | 63,925 | 758 | 64,683 |
| Facilities | 6,979 | - | - | - | 6,979 | 2,344 | 9,323 |
| Genomics | 10 | - | 5,062 | 2,891 | 7,963 | - | 7,963 |
| Genomics - JGI | 72,528 | - | - | 599 | 73,127 | - | 73,127 |
| Information Technology | 2,306 | - | - | - | 2,306 | - | 2,306 |
| Life Sciences | 4,707 | 151 | 21,329 | 3,944 | 30,132 | - | 30,132 |
| Materials Sciences | 62,823 | 593 | 2,969 | 6,476 | 72,860 | 0 | 72,860 |
| Nuclear Science | 22,799 | 247 | 7,836 | 1,291 | 32,173 | 1,266 | 33,439 |
| Physical Biosciences | 51,456 | 494 | 4,623 | 7,106 | 63,680 | - | 63,680 |
| Physics | 51,794 | 364 | - | 156 | 52,314 | 95 | 52,409 |
| Protective Services | 3,155 | - | - | - | 3,155 | 514 | 3,670 |
| Lab Directorate/Other | 1,595 | - | - | - | 1,595 | - | 1,595 |
| Other | - | 106 | - | - | 106 | - | 106 |
| Division Total | 667,268 | 19,292 | 57,036 | 51,245 | 794,842 | 16,435 | 811,276 |

Note: Minor variances may occur due to rounding.

(a) Computing Sciences broken out into CR, SN, and NERSC in FY2015 totalling 167,128 (\$K).



Table 1.2b

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

| | | | | FY2014 | | | |
|--------------------------------------|------------------|---|---------|-----------------|-----------------------|--------------------------|---------|
| Division | DOE Operating | DOE Integrated Contractors Costs | Federal | Non- Federal | Operating Subtotal | Capital and Equipment | Total |
| Accelerator & Fusion Research | 16,896 | 3,989 | - | 1,068 | 21,954 | 6,608 | 28,562 |
| Advanced Light Source | 59,289 | 269 | - | 1,222 | 60,781 | 8,866 | 69,647 |
| Chemical Sciences | 23,705 | - | 1,722 | 1,854 | 27,281 | - | 27,281 |
| Computing Sciences | 121,889 | 3,719 | 3,237 | 457 | 129,303 | 5,020 | 134,324 |
| Environmental Energy Technologies | 82,580 | 1,768 | 9,001 | 14,194 | 107,543 | - | 107,543 |
| Engineering | 163 | 2,307 | 531 | 2,139 | 5,140 | 11 | 5,151 |
| EH&S | 42 | 7 | - | - | 49 | 2 | 51 |
| Earth Sciences | 42,308 | 2,930 | 2,533 | 10,281 | 58,053 | 72 | 58,125 |
| Facilities | 4,058 | - | - | - | 4,058 | 7,512 | 11,571 |
| Genomics | - | - | 4,264 | 2,772 | 7,036 | - | 7,036 |
| Genomics - JGI | 70,474 | - | - | 539 | 71,014 | - | 71,014 |
| Information Technology | 2,422 | - | - | 128 | 2,550 | - | 2,550 |
| Life Sciences | 6,235 | 40 | 24,350 | 4,227 | 34,852 | - | 34,852 |
| Materials Sciences | 65,954 | 227 | 2,511 | 9,340 | 78,031 | 3 | 78,034 |
| Nuclear Science | 19,424 | 2,547 | 7,069 | 1,541 | 30,582 | 1,816 | 32,397 |
| Physical Biosciences | 49,828 | 640 | 5,507 | 5,739 | 61,715 | 1,072 | 62,787 |
| Physics | 48,105 | 385 | (0) | 282 | 48,773 | - | 48,773 |
| Protective Services | 3,345 | - | - | - | 3,345 | 516 | 3,860 |
| Lab Directorate/Other | 1,306 | 4 | - | - | 1,310 | - | 1,310 |
| Other | - | 51 | - | - | 51 | - | 51 |
| Division Total | 618,024 | 18,884 | 60,725 | 55,785 | 753,418 | 31,499 | 784,917 |
| Note: Minor variances may occur | due to roundin | g. | | | | | |

Table 1.2c

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

| | | | | FY2013 | | | |
|--------------------------------------|------------------|---|---------|-----------------|-----------------------|-----------------------|---------|
| Division | DOE Operating | DOE Integrated Contractors Costs | Federal | Non- Federal | Operating Subtotal | Capital and Equipment | Total |
| Accelerator & Fusion Research | 19,768 | 1,869 | 731 | 541 | 22,909 | 8,611 | 31,520 |
| Advanced Light Source | 61,368 | 91 | - | 963 | 62,422 | 12,428 | 74,850 |
| Chemical Sciences | 18,867 | 94 | 1,438 | 1,898 | 22,298 | - | 22,298 |
| Computing Sciences | 129,882 | 841 | 1,825 | 1,387 | 133,935 | 5,601 | 139,536 |
| Environmental Energy Technologies | 74,587 | 2,365 | 9,142 | 17,571 | 103,666 | 114 | 103,779 |
| Engineering | 128 | 2,232 | 950 | 1,073 | 4,382 | 552 | 4,934 |
| EH&S | 1,480 | - | - | - | 1,480 | 39 | 1,518 |
| Earth Sciences | 42,882 | 3,353 | 1,869 | 9,214 | 57,319 | - | 57,319 |
| Facilities | 938 | - | - | - | 938 | 35,517 | 36,455 |
| Genomics | 1 | - | 4,894 | 2,525 | 7,419 | - | 7,419 |
| Genomics - JGI | 67,048 | - | - | 598 | 67,646 | - | 67,646 |
| Information Technology | 1,931 | - | - | 150 | 2,081 | - | 2,081 |
| Life Sciences | 8,081 | - | 28,444 | 4,578 | 41,104 | 19 | 41,123 |
| Materials Sciences | 64,502 | 514 | 2,193 | 8,927 | 76,136 | 2,173 | 78,309 |
| Nuclear Science | 20,283 | 5,311 | 6,650 | 2,009 | 34,253 | 2,940 | 37,193 |
| Physical Biosciences | 51,280 | 453 | 3,797 | 5,731 | 61,261 | 815 | 62,076 |
| Physics | 47,155 | 300 | 604 | 149 | 48,209 | 74 | 48,283 |
| Protective Services | 1,442 | - | - | - | 1,442 | - | 1,442 |
| Lab Directorate/Other | 1,345 | 49 | - | - | 1,394 | - | 1,394 |
| Other | - | 64 | - | - | 64 | - | 64 |
| Division Total | 612,968 | 17,537 | 62,538 | 57,315 | 750,359 | 68,882 | 819,242 |
| Note: Minor variances may occur o | due to rounding | g. | | | | | |



Table 1.2d

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

| | | | | FY2012 | | | |
|-------------------------------------|------------------|---|---------|-----------------|-----------------------|-----------------------|---------|
| Division | DOE Operating | DOE Integrated Contractors Costs | Federal | Non- Federal | Operating Subtotal | Capital and Equipment | Total |
| Accelerator & Fusion Research | 24,493 | 1,115 | 1,768 | 490 | 27,867 | 15,718 | 43,585 |
| Advanced Light Source | 58,387 | 69 | - | 1,010 | 59,466 | 10,892 | 70,357 |
| Chemical Sciences | 17,302 | 49 | 312 | 315 | 17,979 | - | 17,979 |
| Computing Sciences | 119,388 | 2,142 | 2,724 | 1,232 | 125,485 | 264 | 125,749 |
| Environmental Energy Technologies | 74,951 | 2,841 | 10,011 | 18,512 | 106,315 | 691 | 107,006 |
| Engineering | 618 | 1,155 | 982 | 770 | 3,524 | - | 3,524 |
| EH&S | 2,501 | - | - | - | 2,501 | 859 | 3,360 |
| Earth Sciences | 39,490 | 2,005 | 2,740 | 11,164 | 55,399 | - | 55,399 |
| Facilities | 6,101 | - | - | - | 6,101 | 31,742 | 37,843 |
| Genomics | 11 | - | 4,621 | 1,319 | 5,951 | - | 5,951 |
| Genomics - JGI | 70,069 | - | 4 | 676 | 70,749 | 1,306 | 72,055 |
| Information Technology | 2,636 | - | - | 145 | 2,781 | - | 2,781 |
| Life Sciences | 10,581 | - | 33,245 | 4,943 | 48,769 | 616 | 49,384 |
| Materials Sciences | 67,192 | 102 | 3,221 | 8,529 | 79,044 | 2,507 | 81,551 |
| Nuclear Science | 26,821 | 2,679 | 5,185 | 1,283 | 35,969 | 2,840 | 38,809 |
| Physical Biosciences | 50,639 | 259 | 3,656 | 6,555 | 61,109 | 876 | 61,986 |
| Physics | 37,739 | 910 | 217 | 398 | 39,264 | 1,369 | 40,633 |
| Lab Directorate/Other | 1,030 | 58 | - | 0 | 1,088 | - | 1,088 |
| Other | - | 52 | _ | - | 52 | - | 52 |
| Division Total | 609,950 | 13,437 | 68,687 | 57,340 | 749,413 | 69,680 | 819,093 |
| Note: Minor variances may occur due | to rounding. | | | | | | |

Table 1.2e

Costs by Direct Funding Source by Division, FY2011 (\$K)

| | | | | FY2011 | | | |
|------------------------------------|------------------|---|---------|-----------------|-----------------------|-----------------------|---------|
| Division | DOE Operating | DOE Integrated Contractors Costs | Federal | Non- Federal | Operating Subtotal | Capital and Equipment | Total |
| Accelerator & Fusion Research | 21,528 | 1,055 | 1,781 | 977 | 25,341 | 27,328 | 52,669 |
| Advanced Light Source | 51,267 | 137 | - | 879 | 52,283 | 11,170 | 63,453 |
| Chemical Sciences | 15,068 | 120 | 2,042 | 45 | 17,275 | 691 | 17,965 |
| Computing Sciences | 133,114 | 2,236 | 2,593 | 2,365 | 140,308 | 3,007 | 143,316 |
| Information Technology | 2,400 | - | - | 154 | 2,554 | 1,016 | 3,570 |
| Environmental Energy Technologies | 78,124 | 2,940 | 7,202 | 13,763 | 102,029 | 693 | 102,721 |
| Engineering | 162 | 871 | 1,666 | 1,022 | 3,721 | 293 | 4,014 |
| EH&S | 2,504 | - | - | - | 2,504 | - | 2,504 |
| Earth Sciences | 39,342 | 1,962 | 2,754 | 10,565 | 54,622 | 928 | 55,550 |
| Facilities | 8,362 | - | - | - | 8,362 | 28,088 | 36,450 |
| Genomics | 134 | - | 4,673 | 1,553 | 6,360 | - | 6,360 |
| Genomics - JGI | 63,172 | - | 132 | 757 | 64,061 | 2,962 | 67,023 |
| Life Sciences | 10,656 | - | 38,878 | 9,110 | 58,644 | 474 | 59,118 |
| Materials Sciences | 59,974 | 72 | 2,775 | 6,441 | 69,261 | 7,137 | 76,397 |
| Nuclear Science | 22,392 | 1,826 | 3,680 | 937 | 28,834 | 8,919 | 37,753 |
| Physical Biosciences | 52,004 | 325 | 3,562 | 6,013 | 61,904 | 4,024 | 65,928 |
| Physics | 31,622 | 179 | 358 | 1,474 | 33,633 | 6,586 | 40,219 |
| Lab Directorate/Other | 978 | 13 | - | 0 | 991 | - | 991 |
| Other | - | 92 | - | - | 92 | - | 92 |
| Division Total | 592,803 | 11,828 | 72,095 | 56,054 | 732,780 | 103,315 | 836,095 |
| Note: Minor variances may occur du | e to roundin | g. | | | | | |

Table 1.3

Indirect Budget Costs by Division, FY2015 (\$K)

| | Distribut | ed Suppor | t Costs | | | Inst | titutional Costs | | | |
|---|------------------------|---------------------------|--------------|--------|-------|--------|-----------------------|-----------------|------------------|--------------|
| Division/ALD | ALD/ Org. Burden | Service Centers (b) | Other (c) | LDRD | IGPP | G&A | Procurement Burden | Site Support | Travel Burden | Total (a) |
| Accelerator Technology & Applied Physics | 1,649 | - | 246 | 1,256 | - | - | - | - | - | 3,150 |
| Advanced Light Source | 2,387 | - | - | 2,300 | - | - | - | - | - | 4,688 |
| Chief Financial Officer Organization | - | 58 | - | - | - | 11,388 | 11,223 | - | 1,173 | 23,841 |
| Chemical Sciences | 1,912 | - | - | 1,492 | - | - | - | - | - | 3,404 |
| Computational Research | 4,015 | 1,327 | - | 3,187 | - | - | - | - | - | 8,529 |
| Energy Technologies Area | 7,427 | 2,869 | - | 1,970 | - | - | - | - | - | 12,266 |
| Engineering | 4,967 | 1,345 | - | 216 | - | 1,203 | - | 1,435 | - | 9,165 |
| Environment/Health/Safety | - | - | - | - | - | - | - | 21,792 | - | 21,792 |
| Earth Sciences | 4,310 | 52 | - | 2,717 | - | - | - | 5 | - | 7,083 |
| Facilities | 4,533 | 13,610 | - | - | 4,505 | - | 1,866 | 61,030 | - | 85,544 |
| Genomics | 586 | - | - | 314 | - | - | - | - | - | 900 |
| Genomics - JGI | - | 5,581 | - | 988 | - | - | - | - | - | 6,568 |
| Information Technology | 2,713 | 6,643 | - | - | - | 30,407 | - | - | - | 39,762 |
| Lab Directorate | - | - | - | - | - | 17,254 | - | (81) | - | 17,172 |
| Life Sciences | 3,607 | 725 | - | 2,251 | - | - | - | - | - | 6,583 |
| Materials Sciences | 3,899 | 272 | - | 2,152 | - | - | - | - | - | 6,323 |
| National Energy Research Scientific Computing Center | 1,792 | - | - | 391 | - | - | - | - | - | 2,183 |
| Nuclear Science | 1,838 | (0) | - | 1,325 | - | - | - | - | - | 3,162 |
| ALD for Operations | - | 3,982 | - | - | - | 15,944 | - | - | - | 19,927 |
| Physical Biosciences | 3,504 | 8,348 | - | 1,515 | - | - | - | - | - | 13,366 |
| Physics | 1,951 | - | - | 1,572 | - | - | - | - | - | 3,523 |
| Protective Services | - | - | - | - | - | - | - | 11,448 | - | 11,448 |
| Scientific Networking | 541 | - | - | 301 | - | - | - | - | - | 843 |
| Other (d) | - | - | - | - | - | 6,613 | - | - | - | 6,613 |
| Biosciences ALD | 929 | - | - | - | - | - | - | - | - | 929 |
| Computing Sciences ALD | 187 | - | - | - | - | - | - | - | - | 187 |
| Energy Sciences ALD | 531 | - | - | - | - | - | - | - | - | 531 |
| Physical Sciences ALD | 380 | - | - | 831 | - | - | - | - | - | 1,211 |
| Division/ALD Total | 53,657 | 44,812 | 246 | 24,777 | 4,505 | 82,809 | 13,089 | 95,628 | 1,173 | 320,696 |

Note: Minor variances may occur due to rounding.

- (c) Includes: Berkeley Lab's Office of Homeland Security (formerly known as Nuclear Non-Proliferation).
- (d) Includes: UC Management Fee (General Laboratory).

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

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

Table 1.4

Average FTE Breakdown by Division, FY2015

| | Direct Funded FTEs | | | | | | | | |
|---|----------------------------|-------------------------------------|---------------------|---------------------------|------------------------|---------------------------|-------------------------------|-----------------------------|---------------|
| Division | DOE Direct Operating | Other Direct Operating (a) | Capital & Equipment | Direct Funded Total | ALD/ Org. Burden | Service Centers (b) | Operations Overhead (c) | Indirect Funded Total | Total FTEs |
| Accelerator Technology & Applied Physics | 47.1 | 28.9 | 21.4 | 97.4 | 8.7 | - | 4.2 | 12.9 | 110.3 |
| Advanced Light Source | 151.3 | 5.0 | 12.9 | 169.2 | 11.1 | - | 8.1 | 19.2 | 188.4 |
| Chief Financial Officer Organization | - | 0.1 | - | 0.1 | - | 0.1 | 143.1 | 143.2 | 143.3 |
| Chemical Sciences | 88.9 | 3.3 | - | 92.2 | 10.9 | - | 8.4 | 19.4 | 111.6 |
| Computational Research | 81.8 | 5.3 | - | 87.1 | 19.0 | - | 11.9 | 30.9 | 118.0 |
| Energy Technologies Area | 216.7 | 66.8 | - | 283.5 | 35.9 | 20.4 | 6.5 | 62.8 | 346.3 |
| Engineering | - | 10.2 | 0.0 | 10.2 | 23.9 | 6.3 | 9.3 | 39.4 | 49.6 |
| Environment/Health/Safety | 0.0 | - | - | 0.0 | - | - | 93.9 | 93.9 | 93.9 |
| Earth Sciences | 125.8 | 43.3 | 0.4 | 169.5 | 19.0 | 0.2 | 10.8 | 30.0 | 199.5 |
| Facilities | 4.8 | - | 1.6 | 6.4 | 20.9 | 2.5 | 168.6 | 192.0 | 198.4 |
| Genomics | - | 22.4 | - | 22.4 | 3.6 | - | 1.2 | 4.8 | 27.2 |
| Genomics - JGI | 210.8 | 8.8 | - | 219.6 | - | 7.6 | 6.2 | 13.7 | 233.4 |
| Information Technology | 6.8 | - | - | 6.8 | 11.6 | 16.0 | 85.2 | 112.7 | 119.5 |
| Lab Directorate | 0.4 | - | - | 0.4 | - | - | 66.1 | 66.1 | 66.5 |
| Life Sciences | 17.3 | 78.7 | - | 96.0 | 24.3 | 4.5 | 10.9 | 39.6 | 135.6 |
| Materials Sciences | 221.0 | 37.1 | 0.0 | 258.1 | 20.7 | 1.3 | 10.7 | 32.6 | 290.7 |
| National Energy Research Scientific Computing Center | 71.7 | 0.0 | - | 71.7 | 12.8 | - | 1.3 | 14.1 | 85.8 |
| Nuclear Science | 65.9 | 25.4 | 2.0 | 93.3 | 10.6 | 0.0 | 7.3 | 17.9 | 111.1 |
| ALD for Operations | 2.5 | - | - | 2.5 | - | 6.9 | 82.2 | 89.1 | 91.6 |
| Physical Biosciences | 155.9 | 33.6 | - | 189.5 | 20.2 | 17.6 | 7.7 | 45.4 | 235.0 |
| Physics | 92.4 | 1.3 | 0.3 | 93.9 | 12.0 | - | 7.4 | 19.3 | 113.3 |
| Protective Services | 5.6 | - | 0.5 | 6.1 | - | - | 23.2 | 23.2 | 29.3 |
| Scientific Networking | 42.9 | - | - | 42.9 | 4.6 | - | 0.7 | 5.3 | 48.2 |
| Biosciences ALD | ı | - | - | - | 2.7 | 1 | - | 2.7 | 2.7 |
| Computing Sciences ALD | - | - | - | | 0.6 | - | - | 0.6 | 0.6 |
| Earth and Environmental Sciences ALD | - | - | - | - | - | - | - | - | 0.0 |
| Energy Sciences ALD | 0.0 | - | - | 0.0 | 2.7 | - | - | 2.7 | 2.7 |
| Physical Sciences ALD | - | - | - | | 1.3 | | 4.2 | 5.5 | 5.5 |
| Division Total | 1,609.8 | 370.2 | 39.0 | 2,019.0 | 277.0 | 83.3 | 779.0 | 1,139.3 | 3,158.3 |

Notes: Minor variances may occur due to rounding. FTEs are calculated based on translating labor hours charged into workmonths and dividing by division's PLF factor. FTE calculation does not include Contract Labor or Campus Labor.

- Total FTE excludes 57.1 FTEs from non-contract projects (CSRUC, IJE, IPA, MLA, Royalties, and UC Construction Projects).
- (a) Other Direct Operating includes DOE Integrated Contractors, Non-DOE Fellowships, and CRADAs.
- (b) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only.
- (c) Operations Overhead includes: G&A, LDRD, Site Support, Payroll Burden, Procurement, Travel, IGPP, S&S, and Berkeley Lab's Office of Homeland Security.



Table 1.5

Funds Held for Others Cost Trends, FY2011-FY2015 (\$K)

| Funding Source | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 |
|--|--------|--------|--------|--------|--------|
| Royalty | 2,037 | 4,080 | 3,508 | 3,420 | 3,031 |
| Contractor-Funded Institutional Supporting R&D & Gifts | 2,615 | 2,948 | 3,164 | 3,381 | 3,826 |
| Inter-Location Appointments (ILA) | 3,033 | 3,689 | 2,198 | 3,215 | 4,093 |
| UC Construction Projects | 950 | 1,030 | 1,188 | 1,887 | 2,188 |
| Other | 58 | 78 | 79 | 109 | 192 |
| Total | 8,694 | 11,825 | 10,137 | 12,012 | 13,330 |

2. DIRECT FUNDING — DOE & REIMBURSABLE WORK



Total Laboratory Funding

Total Laboratory Funding - \$13.4M Increase

Total funding increased by \$13.4M or 1.7% to \$798M in FY2015. This change is primarily due to a \$17.7M increase in DOE Plant and Capital Equipment and was partially offset by a \$6.3M decrease in DOE Direct Operating funding. Other Direct Operating funding also contributed with a small increase of \$2.0M driven mainly by additional funding for Non-Federal Sponsors.

| Туре | FY2014 (\$M) | FY2015 (\$M) | Delta (\$M) |
|----------|--------------|--------------|-------------|
| Non-ARRA | \$782.85 | \$797.50 | \$14.65 |
| ARRA | \$1.47 | \$0.21 | (\$1.26) |
| Total | \$784.32 | \$797.71 | \$13.39 |

DOE Direct Operating, Plant & Capital Equipment Funding – \$11.3M Increase

Total funding increased by 1.7% during FY2015. The increase was driven by additional funding from the Office of Science (SC) in Operating, Capital Equipment and Construction. Some of this increase was offset by reduced funding levels in Environmental Management (EM) and Energy Efficiency and Renewable Energy (EERE).

Office of Science

Office of Science Operating, Plant & Capital Equipment funding increased \$19.7M or 3.6% in FY2015. The notable changes were:

- \$12.1M increase in Line-Item Construction funding for the new Integrative Genomics Building
- \$7.4M net increase in Advanced Scientific Computing Research (ASCR) Operating and Capital Equipment funding. The increase was mainly driven by an \$18.9M increase allocated to NERSC, ESnet, and Mathematical, Computational, and Computer Sciences Research projects, offset by an \$11.5M decrease in Design Forward as the FY2015 funding increment was provided by NNSA instead of the Office of Science
- \$0.2M net increase in all other Office of Science programs flat relative to FY2014.

Energy Efficiency and Renewable Energy

Energy Efficiency and Renewable Energy (EERE) Operating & Capital Equipment funding decreased \$7.6M or 10.9% in FY2015. The notable changes were:

- \$14.0M decrease in funds for Building Technologies, largely the Standards Program, and Clean Energy Research Center Program projects
- \$0.7 decrease in the funding received for Strategic Programs related to Strategic Priorities and Impact Analysis
- \$7.2M increase in Advanced Manufacturing specifically in the area of Next Generation Manufacturing R&D Projects. Most of the new funding was provided to the Cyclotron Road and Motor Systems Market Assessment projects

Other DOE

Funding from various other DOE programs in FY2015 decreased by \$0.8M or 1.8%. The notable changes were:

- \$18.0M decrease in Environmental Management due to a large increment of Old Town Demolition funding received in the prior year
- \$9.5M increase in National Nuclear Security Administration (NNSA) mostly due to the Design Forward program receiving FY2015 funds from NNSA rather than the Office of Science. The remaining increase was related to the start of the new DNN Photon Source project
- \$7.6M increase was spread across various projects in Fossil Energy, Policy and International Affairs, Energy Policy & Systems Analysis, and Health Safety and Security

Other Direct Operating Funding – \$2.0M Increase

Total Other Direct Operating funding increased \$2.0M or 1.6% in FY2015. The increase was driven by additional funding from Non-Federal Sponsors and Cooperative Research and Development Agreements, offset slightly by a drop in funding received from Federal Agencies. The notable changes were:

Total Laboratory Funding Continued

- \$3.1M increase in funding from Non-Federal Agencies mainly due to growth in funding from State and Local Governments and Non-Profit Organizations
- \$1.2M increase in funding for Cooperative Research and Development Agreements driven by additional funds for an agreement with Total Gas and Power USA and new funding from the California Clean Energy Fund (CALCEF)
- \$0.4M increase from agreements with other DOE Integrated Contractors
- \$2.6M decrease in funding from Federal Agencies mostly driven by a decrease in funding from both the

National Institutes of Health and Other Federal Agencies, partially offset by an increase in funds from the Department of Defense

Data Sources for Tables in this section are as follows:

| Data Type | Source |
|---------------------------------------|--|
| FY2015 Beginning Uncosted Obligations | Carryover Funding as provided in the Berkeley Lab final FY2014 Contract Modification |
| FY2015 Funds | Budget Authority as provided in the Berkeley Lab contract modification for the fiscal year |
| FY2015 Costs | LBNL published Year End Costs |
| FY2015 Ending Uncosted Obligations | The sum of FY2015 Beginning Uncosted, FY2015 Funds and FY2015 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2015 Costs column. Examples of these adjustments include Bridge Funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2015 is (\$-171K). |

Total Laboratory Costs

Total Laboratory Costs - \$26.4M Increase

Total costs increased by \$26.4M or 3.4% to \$811M in FY2015. This change is primarily due to a \$50.6M increase in Non-ARRA Direct Operating costs. This increase was partially offset by a combined \$11.2M decrease in Non-ARRA DOE Plant & Capital Equipment costs and a \$7.2M drop in Non-ARRA Other Direct Operating costs. ARRA costs also contributed with a \$5.8M decrease mainly in DOE Operating and Line-Item Construction.

| Туре | FY2014 (\$M) | FY2015 (\$M) | Delta (\$M) |
|----------|--------------|--------------|-------------|
| Non-ARRA | \$773.39 | \$805.54 | \$32.15 |
| ARRA | \$11.53 | \$5.74 | (\$5.79) |
| Total | \$784.92 | \$811.28 | \$26.36 |

DOE Direct Operating, Plant & Capital Equipment Costs - \$34.2M Increase

Total DOE Direct costs increased by 5.3% in FY2015. This was due to a significant increase in costs in Operating Office of Science projects, partially offset by smaller decreases in costs in Office of Science Plant & Capital Equipment projects and Energy Efficiency and Renewable Energy (EERE) Line-Item Construction projects.

Office of Science

Office of Science Operating, Plant & Capital Equipment costs increased by \$32.5M or 6.1% from FY2014. The notable changes were:

 \$37.2M increase in Advanced Scientific Computing Research costs primarily due to continued investment in High Performance Computing, Next Generation Computing Systems, and the expansion of the Energy Sciences Network



Total Laboratory Costs Continued

- \$8.4M increase in Biological and Environmental Research costs primarily related to continued efforts of the Ameriflux and NGEE Tropics projects in Climate and Environmental Sciences and at the Joint Genome Institute (JGI)
- \$5.7M increase in High Energy Physics costs mainly in the area of Cosmic Frontier Experimental Physics for work done on the DESI and LZ Major Items of Equipment projects
- \$1.9M increase in the Nuclear Physics program mostly split between efforts on projects in the areas of Heavy-lon Physics and Low Energy Physics
- \$12.8M decrease of Plant & Capital Equipment costs primarily due to a reduction in High Performance Computing capital equipment for NERSC, Accelerator Improvement Project costs supporting the Advanced Light Source (ALS), and a shift in effort from the General Purpose Lab construction project for Seismic Phase 2 to the early phases of construction of the new Integrative Genomics Building
- \$7.9M decrease in Basic Energy Sciences mostly due to a reduction in Operating costs for continuation of projects at the Advanced Light Source (ALS)

Office of Energy Efficiency and Renewable Energy Energy Efficiency and Renewable Energy (EERE) Operating, Plant & Capital Equipment costs decreased \$4.7M or 5.9%. The notable changes were:

- \$3.8M decrease in EERE ARRA-funded Construction due to the completion of the FLEXLAB facility
- \$2.6M decrease in Vehicle Technologies, primarily related to continued efforts on Batteries and Electric Drive Technology projects

 \$1.8M increase in operating costs spread between work done on projects in the areas of Advanced Manufacturing and Geothermal Technologies

Other DOE

Other DOE Direct Operating, Plant & Capital Equipment costs increased \$6.4M or 17.3%. The notable changes were:

- \$2.5M increase in Operating costs in Environmental Management primarily due to the continuation of the Old Town Demolition project
- \$2.6M increase in Operating and Capital Equipment cost related to the National Nuclear Security Administration driven by the start of the new DNN Photon Source project
- \$1.4M increase in Operating costs for Fossil Energy primarily in the areas of Cross Cutting Research and Carbon Storage

Other Direct Operating Costs - \$7.8M Decrease

Other Direct Operating costs decreased by \$7.8M or 5.8% in FY2015. The notable changes were:

- \$5.6M decrease in Non-Federal Sponsors due to a decrease in costs in projects funded by State and Local Governments and Non-Profit Organizations
- \$3.7M decrease in Federal Agencies mainly caused by a drop in spending from National Institutes of Health agreements
- \$1.0M increase in costs for Cooperative Research and Development Agreements
- \$0.4M increase in DOE Integrated Contractor costs

Table 2.1

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

| Funding Source (\$K) | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 (a) |
|--|----------|---------|---------|---------|------------|
| DOE DIRECT OPERATING | | | | | |
| Administrator for National Nuclear Security Administration | 6,204 | 7,009 | 14,399 | 7,187 | 14,130 |
| Advanced Research Projects Agency - Energy | - | 2,993 | 4,131 | 993 | 1,779 |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 66,410 | 65,678 | 78,423 | 69,471 | 61,016 |
| Assistant Secretary for Environmental Management | 2,741 | 1,371 | 20,523 | 18,824 | 863 |
| Assistant Secretary for Fossil Energy | 7,297 | 8,316 | 5,215 | 6,384 | 7,799 |
| Assistant Secretary for Nuclear Energy | 3,104 | 2,877 | 2,930 | 3,040 | 2,414 |
| Assistant Secretary for Policy and International Affairs | 108 | 50 | 200 | 425 | 2,958 |
| Loan Programs Office | - | - | 15 | (0) | - |
| Office of Civilian Radioactive Waste Management | (2) | - | - | - | - |
| Office of Electricity Delivery and Energy Reliability | 7,998 | 8,743 | 8,485 | 7,873 | 8,106 |
| Office of Energy and Threat | - | 109 | 138 | 177 | 158 |
| Office of Energy Policy & Systems Analysis | | | | 200 | 2,066 |
| Office of Health Safety and Security | 20 | 57 | 34 | 48 | 1,540 |
| Office of Indian Energy Policy & Programs | | | | 229 | - |
| Office of Legacy Management | - | - | 150 | - | 195 |
| Office of Management | 1 | - | - | (1) | - |
| Office of Science | 475,423 | 497,738 | 506,725 | 527,907 | 533,386 |
| Office of the Chief Information Officer | (137) | - | - | - | - |
| Total DOE Direct Operating | 569,167 | 594,941 | 641,370 | 642,758 | 636,409 |
| OTHER DIRECT OPERATING (b) | <u>'</u> | | | | |
| Federal Agencies | 68,960 | 56,401 | 62,667 | 55,953 | 53,330 |
| Non-Federal Sponsors (c) | 50,240 | 53,460 | 57,737 | 51,967 | 55,066 |
| Cooperative Research and Development Agreements | 1,220 | 417 | 1,192 | 1,019 | 2,175 |
| DOE Integrated Contractors (d) | 11,828 | 13,437 | 17,537 | 18,884 | 19,292 |
| Total Other Direct Operating | 132,249 | 123,716 | 139,132 | 127,824 | 129,864 |
| TOTAL OPERATING | 701,416 | 718,657 | 780,502 | 770,582 | 766,274 |

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 funding deobligations for American Recovery and Reinvestment Act (ARRA) in FY2015:

 The FY2015 ARRA funds were categorized as: Operating (\$290K) and Plant and Equipment (\$-1K). See Table 3.1 for details.
- (b) FY2011, FY2012 and FY2013 ARRA National Institutes of Health (NIH) and National Science Foundation (NSF) awards were obligated to Berkeley Lab by DOE as work for a Non-Federal entity to accommodate OMB apportionment requirements for ARRA. For reporting consistency with prior and future years, all NIH and NSF funding and cost data is reflected under the Work for Other Federal Agencies category.
- (c) Includes both funding and deobligations for Non-Federal Sponsors who are precluded by law from paying an advance under the WN02 program.
- (d) Total funding for Integrated Contractors is assumed to be equal to cost incurred.



Table 2.1

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

| Funding Source (\$K) | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 (a) |
|--|---------|---------|---------|---------|------------|
| DOE PLANT AND CAPITAL EQUIPMENT | | | | | |
| Basic Equipment/Major Items of Equipment | | | | | |
| Administrator for National Nuclear Security Administration | 77 | - | (O) | - | 2,570 |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 1,200 | - | - | (0) | 900 |
| Office of Science | 34,904 | 10,612 | 11,081 | 12,514 | 14,076 |
| Total DOE Capital Equipment | 36,181 | 10,612 | 11,080 | 12,514 | 17,546 |
| | | | | | |
| GENERAL PLANT PROJECTS | | | | | |
| Office of Science | 1,032 | - | 1,250 | (13) | (0) |
| ACCELERATOR IMPROVEMENT PROJECTS | | | | | |
| Office of Science | 2,300 | 3,000 | 550 | 1,250 | 1,800 |
| LINE-ITEM CONSTRUCTION | | | | | |
| Assistant Secretary for Energy Efficiency and Renewable Energy | - | - | - | - | (0) |
| Office of Science | 20,063 | 12,972 | (2) | (8) | 12,090 |
| Total DOE Plant | 23,395 | 15,972 | 1,798 | 1,228 | 13,890 |
| TOTAL DOE BLANT AND CARITAL FOURNATUR | 50.574 | 07.504 | 10.070 | 10.740 | 21.424 |
| TOTAL DOE PLANT AND CAPITAL EQUIPMENT | 59,576 | 26,584 | 12,878 | 13,742 | 31,436 |
| TOTAL LABORATORY | 760,992 | 745,241 | 793,380 | 784,324 | 797,710 |

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 funding deobligations for American Recovery and Reinvestment Act (ARRA) in FY2015:

The FY2015 ARRA funds were categorized as: Operating (\$290K) and Plant and Equipment (\$-1K). See Table 3.1 for details.

Table 2.2

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

| Funding Source (\$K) | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 (a) |
|--|---------|---------|---------|---------|------------|
| DOE DIRECT OPERATING | | | | | |
| Administrator for National Nuclear Security Administration | 6,105 | 7,026 | 9,310 | 9,886 | 11,764 |
| Advanced Research Projects Agency - Energy | 1,966 | 2,517 | 3,651 | 3,074 | 1,609 |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 78,939 | 71,739 | 68,584 | 75,239 | 73,493 |
| Assistant Secretary for Environmental Management | 3,251 | 1,842 | 2,138 | 5,327 | 7,828 |
| Assistant Secretary for Fossil Energy | 11,182 | 9,624 | 9,817 | 6,586 | 8,020 |
| Assistant Secretary for Nuclear Energy | 2,733 | 3,091 | 3,072 | 2,574 | 2,359 |
| Assistant Secretary for Policy and International Affairs | 685 | 98 | 76 | 330 | 189 |
| Loan Programs Office | - | - | 15 | - | - |
| Office of Civilian Radioactive Waste Management | 4 | - | - | - | - |
| Office of Electricity Delivery and Energy Reliability | 6,676 | 8,470 | 7,479 | 8,517 | 9,635 |
| Office of Energy and Threat | 158 | 132 | 164 | 168 | 174 |
| Office of Energy Policy & Systems Analysis | | | | 200 | 419 |
| Office of Health Safety and Security | 31 | 37 | 40 | 35 | 229 |
| Office of Indian Energy Policy & Programs | - | - | - | - | 128 |
| Office of Legacy Management | - | - | - | 123 | 119 |
| Office of Management | - | - | - | - | - |
| Office of Science | 481,048 | 505,375 | 508,623 | 505,965 | 551,302 |
| Office of the Chief Information Officer | 24 | - | - | | - |
| Total DOE Direct Operating | 592,803 | 609,950 | 612,968 | 618,024 | 667,268 |
| OTHER DIRECT OPERATING | | | | | |
| Federal Agencies | 72,095 | 68,687 | 62,538 | 60,725 | 57,036 |
| Non-Federal Sponsors (b) | 55,558 | 56,360 | 56,111 | 54,690 | 49,131 |
| Cooperative Research and Development Agreements | 496 | 980 | 1,204 | 1,095 | 2,114 |
| DOE Integrated Contractors | 11,828 | 13,437 | 17,537 | 18,884 | 19,292 |
| Total Other Direct Operating | 139,977 | 139,464 | 137,391 | 135,394 | 127,573 |
| | | | | | |
| TOTAL OPERATING | 732,780 | 749,413 | 750,359 | 753,418 | 794,841 |

Note: Minor variances may occur due to rounding.

Data Source: Berkeley Lab published Fiscal Year End Costs.

⁽a) Includes costs for American Recovery and Reinvestment Act (ARRA) in FY2015:
The FY2015 ARRA costs were categorized as: Operating (\$5,568K) and Plant and Equipment (\$170K). See Table 3.2 for details.

⁽b) Includes costs for Non-Federal Sponsors who are precluded by law from paying an advance under the WN program.



Table 2.2

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

| Funding Source (\$K) | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 (a) |
|--|---------|---------|---------|---------|------------|
| DOE PLANT AND CAPITAL EQUIPMENT | | | | | |
| Basic Equipment/Major Items of Equipment | | | | | |
| Administrator for National Nuclear Security Administration | 140 | - | - | - | 716 |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 5,372 | 1,567 | 742 | - | 884 |
| Office of Science | 64,165 | 28,306 | 24,773 | 20,004 | 9,855 |
| Total DOE Capital Equipment | 69,677 | 29,874 | 25,515 | 20,004 | 11,456 |
| | | | | | |
| GENERAL PLANT PROJECTS | | | | | |
| Office of Science | 454 | 3,220 | 1,769 | 552 | 514 |
| ACCELERATOR IMPROVEMENT PROJECTS | | | | | |
| Office of Science | 5,444 | 6,985 | 6,622 | 3,430 | 2,120 |
| LINE-ITEM CONSTRUCTION | | | | | |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 1,151 | 2,036 | 8,262 | 3,991 | 170 |
| Office of Science | 26,589 | 27,565 | 26,715 | 3,521 | 2,174 |
| Total DOE Plant | 33,638 | 39,807 | 43,368 | 11,495 | 4,979 |
| TOTAL DOE PLANT AND CAPITAL EQUIPMENT | 103,315 | 69,680 | 68,882 | 31,499 | 16,434 |
| | | | | | |
| TOTAL LABORATORY (c) | 836,095 | 819,093 | 819,242 | 784,917 | 811,276 |

Note: Minor variances may occur due to rounding.

Data Source: Berkeley Lab published Fiscal Year End Costs.

- (a) Includes costs for American Recovery and Reinvestment Act (ARRA) in FY2015:
 The FY2015 ARRA costs were categorized as: Operating (\$5,568K) and Plant and Equipment (\$170K). See Table 3.2 for details.
- (c) FY2015 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 FY2015 is -\$171K.

Table 2.3

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

| Funding and Cost by Source (\$K) | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|---|---------------------------------------|-----------------|-----------------|---|
| DOE DIRECT OPERATING | | | | |
| Administrator for National Nuclear Security Administration | 5,453 | 14,130 | 11,764 | 7,819 |
| Advanced Research Projects Agency - Energy | 2,191 | 1,779 | 1,609 | 2,362 |
| Assistant Secretary for Electricity Delivery & Energy Reliability | 11,955 | 8,106 | 9,635 | 10,426 |
| Assistant Secretary for Energy Efficiency & Renewable Energy | 60,523 | 61,016 | 73,493 | 48,041 |
| Assistant Secretary for Environmental Management | 32,662 | 863 | 7,828 | 25,697 |
| Assistant Secretary for Fossil Energy | 9,814 | 7,799 | 8,020 | 9,590 |
| Assistant Secretary for Nuclear Energy | 1,027 | 2,414 | 2,359 | 1,082 |
| Assistant Secretary for Policy & International Affairs | 298 | 2,958 | 189 | 3,066 |
| Loan Programs Office | - | - | - | - |
| Office of Energy & Threat | 64 | 158 | 174 | 48 |
| Office of Energy Policy & Systems Analysis | 39 | 2,066 | 419 | 1,686 |
| Office of Health, Safety & Security | 34 | 1,540 | 229 | 1,345 |
| Office of Indian Energy Policy & Programs | 229 | - | 128 | 101 |
| Office of Legacy Management | 27 | 195 | 119 | 104 |
| Office of Management | - | - | - | - |
| Office of Science | 245,285 | 533,386 | 551,302 | 227,308 |
| Total DOE Direct Operating | 369,601 | 636,409 | 667,268 | 338,673 |
| OTHER DIRECT OPERATING | | | | |
| Federal Agencies | 48,727 | 53,330 | 57,036 | 45,658 |
| Non-Federal Sponsors (a) | 26,191 | 55,066 | 49,131 | 32,627 |
| Cooperative Research and Development Agreements | 495 | 2,175 | 2,114 | 588 |
| DOE Integrated Contractors (b) | - | 19,292 | 19,292 | - |
| Total Other Direct Operating (c) | 75,412 | 129,864 | 127,573 | 78,873 |
| TOTAL OPERATING | 445,013 | 766,274 | 794,841 | 417,546 |

Note: Minor variances may occur due to rounding.

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

⁽b) Total funding for Integrated Contractors is assumed to be equal to cost incurred.

⁽c) The sum of FY2015 Beginning Uncosted Obligations, FY2015 Funds, minus, FY2015 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2015 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2015 is -\$171K.



Table 2.3

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

| Funding and Cost by Source (\$K) | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|--|---------------------------------------|-----------------|-----------------|---|
| DOE PLANT AND EQUIPMENT | | | | |
| BASIC EQUIPMENT/MAJOR ITEMS OF EQUIPMENT | | | | |
| Administrator for National Nuclear Security Administration | - | 2,570 | 716 | 1,854 |
| Assistant Secretary for Energy Efficiency & Renewable Energy | - | 900 | 884 | 16 |
| Office of Science | 18,313 | 14,076 | 9,855 | 22,533 |
| Total Capital Equipment | 18,313 | 17,546 | 11,456 | 24,403 |
| GENERAL PLANT PROJECTS | | | | |
| Office of Science | 584 | (0) | 514 | 70 |
| ACCELERATOR IMPROVEMENT PROJECTS | | ' | | |
| Office of Science | 2,645 | 1,800 | 2,120 | 2,324 |
| LINE-ITEM CONSTRUCTION | | ' | | |
| Assistant Secretary for Energy Efficiency & Renewable Energy | 170 | (0) | 170 | - |
| Office of Science | 177 | 12,090 | 2,174 | 10,093 |
| Total DOE Plant | 3,576 | 13,890 | 4,979 | 12,488 |
| TOTAL DOE PLANT AND CAPITAL EQUIPMENT | 21,889 | 31,436 | 16,434 | 36,890 |
| TOTAL LABORATORY (d) | 466,902 | 797,710 | 811,276 | 454,436 |

Note: Minor variances may occur due to rounding.

The FY2015 ARRA costs were categorized as: Operating (\$5,568K) and Plant and Equipment -\$170K. See Table 3.2 for details.

⁽d) Includes American Recovery and Reinvestment Act (ARRA) in FY2015:

The FY2015 ARRA funds were categorized as: Operating (\$290K) and Plant and Equipment (\$-1K). See Table 3.1 for details.

Table 2.4

FY2015 Funding and Costs by DOE Programs (\$K)

| ADMINSTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION | | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations | |
|---|--|---------------------------------------|-----------------|-----------------|---|--|
| OPERA | TING | | | | | |
| DP09 | Readiness In Technical Base and Facilities (RTBF) | - | 500 | 61 | 439 | |
| DP15 | Advanced Simulation and Computing Campaign | 959 | 5,000 | 2,018 | 3,941 | |
| DP40 | Nuclear Weapons Incident Response | 12 | 20 | 30 | 1 | |
| MO01 | Cyber Security | 2,624 | 859 | 2,061 | 1,422 | |
| NN20 | Nonproliferation And Verification Research and Development | 1,527 | 7,747 | 7,263 | 2,011 | |
| NN40 | Nonproliferation and International Security (NIS) | 332 | 5 | 332 | 5 | |
| Total Operating | | 5,453 | 14,130 | 11,764 | 7,819 | |
| CAPITAL EQUIPMENT | | | | | | |
| NN20 | Nonproliferation And Verification Research and Development | - | 2,570 | 716 | 1,854 | |
| Total Capital Equipment (a) | | 0 | 2,570 | 716 | 1,854 | |
| | | | | | | |
| TOTAL ADMINSTRATOR FOR NATIONAL NUCLEAR SECURITY ADMINISTRATION | | 5,453 | 16,701 | 12,481 | 9,673 | |

Note: Minor variances may occur due to rounding.

⁽a) The sum of FY2015 Beginning Uncosted Obligations, FY2015 Funds, minus, FY2015 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2015 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2015 is -\$171K.



Table 2.4

FY2015 Funding and Costs by DOE Programs (\$K) Continued

| | OFFICE OF SCIENCE | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations | | | |
|---------------------|---|---------------------------------------|-----------------|-----------------|---|--|--|--|
| OPERATING | | | | | | | | |
| AT10 | SciDAC | - | 50 | 6 | 44 | | | |
| AT40 | Discovery Plasma Science | - | 1,082 | 138 | 944 | | | |
| AT50 | FES - Science | 679 | - | 567 | 113 | | | |
| FS10 | Safeguards and Security - Science | 1,799 | 6,033 | 5,411 | 2,421 | | | |
| KA11 | Proton Accelerator-Based Physics | 38 | - | - | 38 | | | |
| KA14 | Theoretical Physics | 350 | (0) | 331 | 19 | | | |
| KA15 | Advanced Technology R&D (prior to restructure) | 1 | (0) | - | 1 | | | |
| KA21 | Energy Frontier Experimental Physics | 4,914 | 7,961 | 8,781 | 4,095 | | | |
| KA22 | Intensity Frontier Experimental Physics | 3,680 | 18,725 | 18,883 | 3,522 | | | |
| KA23 | Cosmic Frontier Experimental Physics | 5,990 | 13,829 | 15,164 | 4,655 | | | |
| KA24 | Theoretical and Computational Physics | 3,049 | 4,965 | 4,908 | 3,106 | | | |
| KA25 | Advanced Technology R&D | 5,763 | 17,819 | 18,779 | 4,803 | | | |
| KA26 | Accelerator Stewardship | 30 | 509 | 161 | 378 | | | |
| KB01 | Medium Energy Physics | 294 | 544 | 702 | 136 | | | |
| KB02 | Heavy-Ion Physics | 2,490 | 4,775 | 6,540 | 696 | | | |
| KB03 | Nuclear Theory | 1,589 | 2,572 | 2,846 | 1,314 | | | |
| KB04 | Low Energy Physics | 3,840 | 9,262 | 9,592 | 3,510 | | | |
| KC02 | Materials Sciences and Engineering | 11,594 | 25,966 | 27,120 | 10,440 | | | |
| KC03 | Chemical Sciences, Geosciences, and Biosciences | 27,663 | 37,274 | 44,176 | 20,761 | | | |
| KC04 | Scientific User Facilities | 16,228 | 87,885 | 81,440 | 22,659 | | | |
| KJ04 | Mathematical, Computational, and Computer Sciences Research | 35,246 | 37,336 | 28,485 | 44,096 | | | |
| KJ05 | High Performance Computing and Network Facilities | 68,255 | 108,395 | 127,900 | 48,741 | | | |
| KL10 | Internships and Visiting Faculty Activities at DOE Labs | 687 | 1,702 | 1,423 | 966 | | | |
| KP12 | Climate Change Research | 69 | - | 12 | 57 | | | |
| KP15 | Biological Research | 41 | - | (1) | 41 | | | |
| KP16 | Biological Systems Science | 31,770 | 118,493 | 121,934 | 28,321 | | | |
| KP17 | Climate and Environmental Sciences | 19,229 | 28,208 | 26,006 | 21,430 | | | |
| Total Operating (a) | | 245,285 | 533,386 | 551,302 | 227,308 | | | |

Note: Minor variances may occur due to rounding.

⁽a) The sum of FY2015 Beginning Uncosted Obligations, FY2015 Funds, minus, FY2015 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2015 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2015 is -\$171K.

Table 2.4

FY2015 Funding and Costs by DOE Programs (\$K) Continued

| | OFFICE OF SCIENCE | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|--|---|---------------------------------------|-----------------|-----------------|---|
| CAPITA | L EQUIPMENT | <u> </u> | | | |
| AT40 | Discovery Plasma Science | - | 950 | 629 | 321 |
| AT50 | FES - Science | 750 | - | 743 | 7 |
| KA11 | Proton Accelerator-Based Physics | 115 | - | 115 | - |
| KA15 | Advanced Technology R&D (prior to restructure) | 23 | (1) | - | 23 |
| KA22 | Intensity Frontier Experimental Physics | 728 | - | 34 | 695 |
| KA23 | Cosmic Frontier Experimental Physics | - | 1,000 | 95 | 905 |
| KA25 | Advanced Technology R&D | 733 | 2,170 | 2,424 | 479 |
| KA26 | Accelerator Stewardship | - | 257 | 138 | 119 |
| KB04 | Low Energy Physics | 3,685 | 1,309 | 1,266 | 3,728 |
| KC02 | Materials Sciences and Engineering | 251 | 100 | 280 | 71 |
| KC03 | Chemical Sciences, Geosciences, and Biosciences | 718 | - | 706 | 12 |
| KC04 | Scientific User Facilities | 5,309 | 3,994 | 3,374 | 5,929 |
| KJ05 | High Performance Computing and Network Facilities | 1,289 | 3,300 | - | 4,589 |
| KP16 | Biological Systems Science | 4,711 | 997 | 51 | 5,657 |
| Total C | apital Equipment (a) | 18,313 | 14,076 | 9,855 | 22,533 |
| GENER | AL PLANT PROJECTS | | | | |
| FS10 | Safeguards and Security - Science | 584 | - | 514 | 70 |
| Total G | eneral Plant Projects (a) | 584 | 0 | 514 | 70 |
| | | | | | |
| ACCEL | ERATOR IMPROVEMENT PROJECTS | <u> </u> | | | |
| KC04 | Scientific User Facilities | 2,645 | 1,800 | 2,120 | 2,324 |
| Total A | ccelerator Improvement Projects (a) | 2,645 | 1,800 | 2,120 | 2,324 |
| I INE_ITI | EM CONSTRUCTION | | | | |
| 39KG | Science Laboratories Infrastructure | 177 | 12,090 | 2,174 | 10,093 |
| | ne-Item Construction (a) | 177 | 12,090 | 2,174 | 10,093 |
| | | | , | , | -,,,, |
| TOTAL DOE PLANT | | 3,406 | 13,890 | 4,809 | 12,488 |
| TOTAL | OFFICE OF SCIENCE | 267,004 | 561,352 | 565,966 | 262,329 |
| Nata Mineral enimene en accuración de la terral de la ter | | 207,004 | 301,032 | 303,730 | 202,027 |

Note: Minor variances may occur due to rounding.

⁽a) The sum of FY2015 Beginning Uncosted Obligations, FY2015 Funds, minus, FY2015 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2015 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2015 is -\$171K.



Table 2.4

FY2015 Funding and Costs by DOE Programs (\$K) Continued

| ASSIS | STANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|--------|---|---------------------------------------|-----------------|-----------------|---|
| OPERA1 | TING | | | | |
| BM01 | Biomass/Biofuels Energy Systems | 4,652 | 5,633 | 4,265 | 6,021 |
| BR01 | EE Departmental Admin, Rec Act | 1,045 | (189) | 856 | - |
| BTO1 | Residential Buildings Integration | 1,097 | 2,064 | 1,979 | 1,183 |
| BTO2 | Commercial Buildings Integration | 10,451 | 5,998 | 11,606 | 4,846 |
| BT03 | Emerging Technologies | 4,741 | 1,816 | 5,591 | 964 |
| BTO4 | Equipment and Buildings Standards | 13,472 | 8,806 | 16,435 | 5,835 |
| BT08 | EE Building Systems Design Energy Innovation Hubs | 16 | 100 | 16 | 100 |
| EB21 | Solar Energy | 28 | - | 10 | 18 |
| EB25 | Wind Energy Systems | 7 | - | 6 | 0 |
| EB36 | Facilities and Infrastructure | 5 | (0) | 5 | - |
| EB40 | Geothermal Technologies | 965 | - | 526 | 439 |
| EB42 | Hydrogen Research R&D | 21 | - | 14 | 7 |
| EB51 | Energy Efficiency and Renewable Energy Program Direction | 390 | (60) | 330 | - |
| EB57 | Energy Efficiency and Renewable Energy (EERE) Program Support | 46 | (0) | 16 | 30 |
| ED19 | Industries Of The Future (Crosscutting) | 29 | (0) | 2 | 27 |
| ED20 | Industrial Technical Assistance | 1,348 | 3,542 | 2,369 | 2,521 |
| ED27 | Next Generation Manufacturing R&D Projects | 543 | 7,120 | 740 | 6,923 |
| ED28 | Advanced Manufacturing R&D Facilities | 157 | - | 144 | 13 |
| EL17 | Federal Energy Management Program | 2,995 | 2,556 | 3,920 | 1,630 |
| GT01 | Enhanced Geothermal Systems | 5,153 | 938 | 2,606 | 3,485 |
| GT02 | Low Temperature and Co-produced Resource | 500 | 240 | 237 | 503 |
| GT03 | Innovative Exploration Technologies | 992 | 2,554 | 1,449 | 2,098 |
| GT04 | Systems Analysis | - | 325 | - | 325 |
| HT01 | Fuel Cell Systems R&D | 912 | 1,564 | 2,035 | 441 |
| HT02 | Hydrogen Fuel R&D | 885 | 1,892 | 808 | 1,969 |
| HT07 | Manufacturing R&D | 129 | 150 | 202 | 77 |
| PG03 | Strategic Priorities and Impact Analysis | 1,350 | 692 | 1,205 | 837 |
| PG04 | Technologoy-to-Market | - | 425 | 132 | 293 |
| PG05 | International | 728 | 240 | 740 | 229 |
| SLO1 | Concentrating Solar Power | 21 | 38 | 4 | 55 |
| SL02 | Photovoltaic R&D | 338 | 133 | 414 | 57 |
| SL03 | Systems Integration | - | 388 | - | 388 |
| SL04 | Balance of Systems Soft Cost Reduction | 855 | 1,751 | 1,330 | 1,276 |
| SL05 | Innovations in Manufacturing Competitiveness | - | 700 | 213 | 487 |
| VT02 | Outreach, Deployment & Analysis | 110 | 220 | 107 | 223 |
| VT04 | Vehicle Technologies | - | 15 | 15 | 0 |
| VT05 | Materials Technology | 99 | 277 | 269 | 107 |
| VT11 | Hybrid Electric Systems | 3 | _ | _ | 3 |

Table 2.4

FY2015 Funding and Costs by DOE Programs (\$K) Continued

| ASSIS | STANT SECRETARY FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|----------------|--|--|-----------------|-----------------|---|
| VT12 | Batteries and Electric Drive Technology | 5,073 | 8,740 | 10,824 | 2,990 |
| VT13 | Vehicle & Systems Simulation and Testing | 147 | 94 | 88 | 153 |
| WC01 | Water Power Program | - | 95 | 61 | 34 |
| WI03 | State Energy Program (Grants) | 763 | 771 | 728 | 806 |
| WI04 | Other State Energy Activities | 1 | - | 0 | 1 |
| WI06 | Intergovernmental Activities | 70 | 150 | 92 | 129 |
| WI07 | Weatherization Assistance Program | 83 | 125 | 195 | 13 |
| WW02 | Technology Viability | 198 | 331 | 454 | 75 |
| WW03 | Technology Application | 102 | 783 | 454 | 431 |
| Total O | perating | 60,523 | 61,016 | 73,493 | 48,041 |
| CAPITA BTO4 | L EQUIPMENT Equipment and Buildings Standards | | 900 | 884 | 16 |
| Total Co | apital Equipment (a) | 0 | 900 | 884 | 16 |
| LINE-ITE | M CONSTRUCTION | | | | |
| 39EB | Facilities and Infrastructure | 170 | (0) | 170 | - |
| Total Lir | ne-Item Construction (a) | 170 | (0) | 170 | 0 |
| TOTAL | OOE PLANT | 170 | (0) | 170 | 0 |
| | ASSISTANT SECRETARY FOR ENERGY EFFICIENCY NEWABLE ENERGY | 60,693 | 61,916 | 74,547 | 48,057 |

Note: Minor variances may occur due to rounding.

⁽a) The sum of FY2015 Beginning Uncosted Obligations, FY2015 Funds, minus, FY2015 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2015 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2015 is -\$171K.



Table 2.4

FY2015 Funding and Costs by DOE Programs (\$K) Continued

| | OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|---------|---|---------------------------------------|-----------------|-----------------|---|
| OPERA | TING | | | | |
| TD50 | Research and Development | 618 | (0) | 565 | 53 |
| TD54 | Operations and Analysis | 161 | - | 159 | 2 |
| TE11 | Clean Energy Transmission & Reliability | 5,275 | 3,895 | 4,481 | 4,689 |
| TE12 | Smart Grid Research and Development | 1,762 | 1,465 | 1,491 | 1,736 |
| TE14 | Energy Storage | 250 | 50 | 300 | 1 |
| TF00 | National Electricity Delivery | 3,889 | 2,646 | 2,591 | 3,943 |
| TG01 | Infrastructure Security & Energy Restoration | - | 50 | 48 | 2 |
| Total C | perating | 11,955 | 8,106 | 9,635 | 10,426 |
| TOTAL | OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY | 11,955 | 8,106 | 9,635 | 10,426 |
| Note: | Minor variances may occur due to roundina. | | | | |

Note: Minor variances may occur due to rounding.

| | ASSISTANT SECRETARY FOR FOSSIL ENERGY | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|---------|--|---------------------------------------|-----------------|-----------------|---|
| OPERAT | ING | | | | |
| AA15 | Advanced Research | 4 | - | - | 4 |
| AA20 | Central Systems | 34 | - | 20 | 14 |
| AA25 | Fuel Cells | 3 | - | - | 3 |
| AA30 | Sequestration | 651 | (5) | 354 | 292 |
| AA60 | Advanced Energy Systems | 0 | - | - | 0 |
| AA65 | Carbon Capture | 33 | 50 | 33 | 50 |
| AA70 | Carbon Storage | 4,718 | 2,303 | 3,562 | 3,456 |
| AA90 | Cross Cutting Research | 3,180 | 4,601 | 3,052 | 4,730 |
| AB05 | Natural Gas Technologies | 794 | 850 | 862 | 782 |
| AC10 | Oil Technology | 142 | - | 61 | 80 |
| AD20 | Contractual Services And Supplies | 136 | - | 65 | 72 |
| AY05 | Clean Coal Power Initiative | 21 | - | 8 | 13 |
| BD00 | Unconventional Fossil Energy Technologies | 93 | - | - | 93 |
| CE03 | Center for Zero Emissions Technology - Montana State | 3 | - | 3 | 0 |
| CE47 | Innovations for Low-Cost Gasification Systems | 1 | - | - | 1 |
| CE54 | Design and Test of an Advanced SOFC Generator in PA | 0 | - | - | 0 |
| Total O | perating | 9,814 | 7,799 | 8,020 | 9,590 |
| TOTAL A | ASSISTANT SECRETARY FOR FOSSIL ENERGY | 9,814 | 7,799 | 8,020 | 9,590 |
| Note: N | Minor variances may occur due to rounding. | | | | |

Table 2.4

FY2015 Funding and Costs by DOE Programs (\$K) Continued

TOTAL ASSISTANT SECRETARY FOR NUCLEAR ENERGY

Note: Minor variances may occur due to rounding.

| | ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|---------|---|--|-----------------|-----------------|---|
| OPERA. | TING | | | | |
| EY40 | Defense Site Acceleration Completion - Technology Development | 268 | 760 | 796 | 232 |
| EY80 | Defense Environmental Cleanup - Program Support | 1 | 40 | 25 | 16 |
| EZ50 | Non-Defense Environmental Cleanup - Small Sites | 32,393 | 63 | 7,007 | 25,449 |
| Total O | perating | 32,662 | 863 | 7,828 | 25,697 |
| TOTAL | ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT | 32,662 | 863 | 7,828 | 25,697 |
| Note: I | Minor variances may occur due to rounding. | | | | |
| | OFFICE OF HEALTH SAFETY AND SECURITY | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
| OPERA: | TING | | | | |
| HQ10 | Employee Compensation | 34 | 40 | 40 | 34 |
| HU10 | Corporate Safety Program | - | 1,500 | 189 | 1,311 |
| Total O | perating | 34 | 1,540 | 229 | 1,345 |
| TOTAL | OFFICE OF HEALTH SAFETY AND SECURITY | 34 | 1,540 | 229 | 1,345 |
| Note: I | Minor variances may occur due to rounding. | | | | |
| | ASSISTANT SECRETARY FOR NUCLEAR ENERGY | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
| OPERA: | TING | | | | |
| AF58 | Fuel Cycle Research and Development (FCR&D) | 1,008 | 2,285 | 2,247 | 1,045 |
| DF01 | First Repository | 18 | - | - | 18 |
| NT01 | Crosscutting Technology Development | 1 | (1) | - | - |
| NT05 | Nuclear Energy Advanced Modeling and Simulation | 1 | 100 | 82 | 19 |
| RC04 | Advanced Reactor Concepts (ARC) | - | 30 | 30 | 0 |
| Total O | perating | 1,027 | 2,414 | 2,359 | 1,082 |

continued...

1,082

1,027

2,414

2,359



Table 2.4

FY2015 Funding and Costs by DOE Programs (\$K) Continued

| OFFICE OF INDIAN ENERGY POLICY & PROGRAMS | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|--|--|-----------------|-----------------|---|
| OPERATING | | | | |
| IP10 Salaries & Benefits | 229 | - | 128 | 101 |
| Total Operating | 229 | 0 | 128 | 101 |
| TOTAL OFFICE OF INDIAN ENERGY POLICY & PROGRAMS | 229 | 0 | 128 | 101 |
| Note: Minor variances may occur due to rounding. | | | | |
| OFFICE OF LEGACY MANAGEMENT | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
| OPERATING | | | | |
| LM01 Legacy Management Activities - Defense | 27 | 195 | 119 | 103 |
| Total Operating | 27 | 195 | 119 | 103 |
| OFFICE OF ENERGY AND THREAT | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
| OPERATING | | | | |
| GD50 Cyber | 64 | 158 | 174 | 48 |
| Total Operating | 64 | 158 | 174 | 48 |
| | | | | |
| TOTAL OFFICE OF ENERGY AND THREAT | 64 | 158 | 174 | 48 |
| Note: Minor variances may occur due to rounding. | | | | |
| ASSISTANT SECRETARY FOR POLICY AND INTERNATIONAL AFFAIRS | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
| OPERATING | | | | |
| PE04 Office Of Environmental Analysis | 77 | - | 11 | 66 |
| PE06 Climate Change Technology Program-International | 220 | (0) | 178 | 42 |
| WA22 Office of International Affairs - Program Direction | 0 | 2,958 | 0 | 2,958 |
| Total Operating | 298 | 2,958 | 189 | 3,066 |
| TOTAL ASSISTANT SECRETARY FOR POLICY AND INTERNATIONAL AFFAIRS | 298 | 2,958 | 189 | 3,066 |
| Note: Minor variances may occur due to rounding. | | -, | , | -,-30 |

Table 2.4

FY2015 Funding and Costs by DOE Programs (\$K) Continued

| | ADVANCED RESEARCH PROJECTS AGENCY - ENERGY | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|---------|--|---------------------------------------|-----------------|-----------------|---|
| OPERA | TING | | | | |
| CJ01 | ARPA-E Projects | 2,191 | 1,759 | 1,605 | 2,344 |
| CJ02 | Program Direction | - | 20 | 3 | 17 |
| Total C | Operating | 2,191 | 1,779 | 1,609 | 2,361 |
| TOTAL | ADVANCED RESEARCH PROJECTS AGENCY - ENERGY | 2,191 | 1,779 | 1,609 | 2,361 |
| Note: | Minor variances may occur due to rounding. | | · | · | , |
| | OFFICE OF ENERGY POLICY & SYSTEMS ANALYSIS | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
| OPERA | TING | | | | |
| EP01 | EPSA Program Direction | - | 2,066 | 382 | 1,684 |
| PE01 | Policy, Planning and Analysis | 39 | - | 37 | 3 |
| Total C | Operating | 39 | 2,066 | 419 | 1,686 |
| | All DOE Programs (\$K) | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
| TOTAL | OPERATING | 369,601 | 636,409 | 667,268 | 338,673 |
| TOTAL | CAPITAL EQUIPMENT | 18,313 | 17,546 | 11,456 | 24,403 |
| TOTAL | GENERAL PLANT PROJECTS | 584 | - | 514 | 70 |
| TOTAL | ACCELERATOR IMPROVEMENT PROJECTS | 2,645 | 1,800 | 2,120 | 2,324 |
| TOTAL | LINE ITEM CONSTRUCTION | 347 | 12,090 | 2,344 | 10,093 |
| TOTAL | FUNDING AND COSTS | 391,490 | 667,846 | 683,702 | 375,564 |
| Note: | Minor variances may occur due to rounding. | ' | | | |



Table 2.5

FY2015 Funding and Costs by Other Direct Operating Source (\$K)

| Funding Source | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|---|---------------------------------------|-----------------|-----------------|---|
| REIMBURSABLE WORK | , | | | |
| Federal Agencies | | | | |
| Department Of Agriculture | 297 | - | 205 | 98 |
| Department Of Defense | 9,564 | 19,393 | 15,255 | 13,963 |
| Department of Homeland Security - Borders and Transportation | 385 | 329 | 324 | 391 |
| Department of Homeland Security - Domestic Nuclear Detection Office | 770 | 2,605 | 2,213 | 1,170 |
| Department of Homeland Security - Science and Technology | 783 | 2,050 | 1,828 | 1,005 |
| Department Of Housing And Urban Development | 0 | 194 | 134 | 64 |
| Department Of State - Other | 549 | 1,149 | 346 | 2,734 |
| Department Of The Interior | 682 | 422 | 870 | 259 |
| Environmental Protection Agency | 600 | 641 | 779 | 484 |
| National Aeronautics And Space Administration | 2,475 | 2,291 | 3,125 | 1,732 |
| National Institutes of Health | 26,867 | 21,978 | 26,662 | 22,208 |
| National Science Foundation | 223 | - | 42 | 182 |
| Nuclear Regulatory Commission | 389 | 406 | 442 | 366 |
| Other Federal Agencies | 4,964 | 1,874 | 4,637 | 992 |
| Other Federal Agencies - Defense-Related Activities | 0 | - | - | 0 |
| Other Federal Agencies - Energy-Related Activities | 177 | - | 175 | 8 |
| Total Federal Agencies | 48,727 | 53,330 | 57,036 | 45,658 |
| Non-Federal Agencies | | I. | ı | I |
| Foreign Governments (a) | 1,015 | (90) | 688 | 257 |
| Domestic and Foreign Industry | 8,389 | 19,597 | 20,140 | 8,757 |
| State and Local Governments & NPO's (a) | 10,757 | 25,284 | 16,972 | 18,671 |
| Universities and Institutes (a) | 6,029 | 10,275 | 11,331 | 4,942 |
| Total Non-Federal Agencies | 26,191 | 55,066 | 49,131 | 32,627 |
| Cooperative Research and Development Agreements | | | | |
| CRADA - Other | 265 | 1,454 | 1,258 | 502 |
| CRADA - Small Business | 230 | 721 | 856 | 86 |
| Total Cooperative Research and Development Agreements | 495 | 2,175 | 2,114 | 588 |
| TOTAL REIMBURSABLE WORK | 75.412 | 110,572 | 108.281 | 78.872 |

Note: Minor variances may occur due to rounding.

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

Table 2.5

FY2015 Funding and Costs by Other Direct Operating Source (\$K) Continued

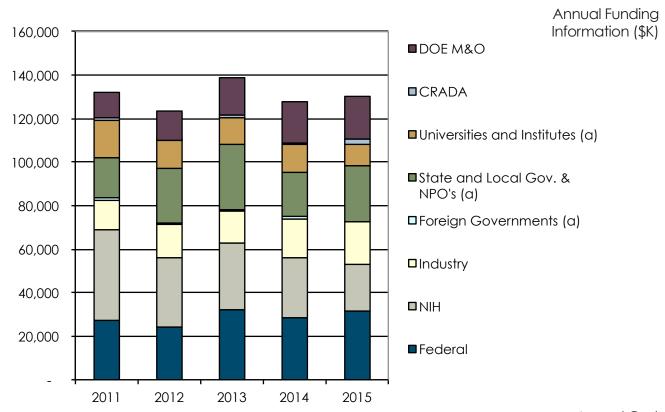
| Funding Source | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|--|---------------------------------------|-----------------|-----------------|---|
| DOE Integrated Contractors | | | | |
| Work Performed for Other DOE Locations (b) | - | 19,292 | 19,292 | - |
| Total DOE Integrated Contractors | - | 19,292 | 19,292 | - |
| | | | | |
| TOTAL OTHER DIRECT OPERATING (c) (d) | 75,412 | 129,864 | 127,573 | 78,872 |

- (b) Total funding for Integrated Contractors is assumed to be equal to cost incurred.
- (c) The sum of FY2015 Beginning Uncosted Obligations, FY2015 Funds, minus, FY2015 Costs does not equal FY2015 Ending Uncosted Obligations due to various adjustments not reflected in the FY2015 Costs column. Examples of these adjustments include bridge funding, inventory, suspense items, and DOE's Federal Administrative Charge. The total of these adjustments for FY2015 is -\$171K.
- (d) Includes FY2015 Beginning Uncosted Obligations, FY2015 Funds and FY2015 Costs for American Recovery and Reinvestment Act (ARRA), (\$1,107K, -\$173K, \$934K) see Table 3.4 for details by sponsor.

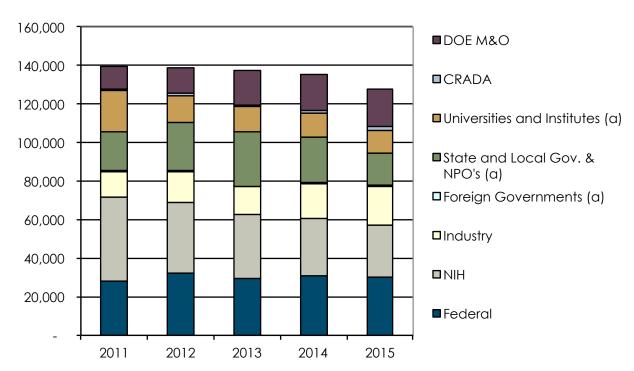


Figure 2.1

FY2015 Funding and Cost Trends by Other Direct Operating Source (\$K)



Annual Cost Information (\$K)



3. AMERICAN RECOVERY & REINVESTMENT ACT OF 2009 (ARRA)



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

| Berkeley Lab Fund Trends by funding source (\$K) | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 |
|--|----------|----------|--------|--------|--------|
| DOE OPERATING | | | | | |
| Advanced Research Projects Agency - Energy | - | - | - | - | (71) |
| Assistant Secretary for Energy Efficiency and Renewable Energy | 2,289 | (0) | (2) | (1) | (543) |
| Assistant Secretary for Fossil Energy | - | - | - | - | (5) |
| Office of Electricity Delivery and Energy Reliability | - | - | - | - | (0) |
| Office of Science (a) | 4,948 | 13,074 | (5) | (3) | (59) |
| Total Operating | 7,237 | 13,074 | (7) | (4) | (677) |
| OTHER DIRECT OPERATING | <u>'</u> | | | | |
| Federal Agencies | 6,182 | 1,621 | (12) | (57) | - |
| Non Federal Sponsors | 3,504 | 1,116 | 1,154 | 130 | 50 |
| DOE Integrated Contractors (b) | 1,924 | 2,198 | 1,529 | 1,398 | 837 |
| Total Other Direct Operating | 11,610 | 4,935 | 2,670 | 1,472 | 887 |
| TOTAL OPERATING | 18,847 | 18,009 | 2,663 | 1,468 | 209 |
| DOE PLANT AND CAPITAL EQUIPMENT | | | | | |
| Basic Equipment/Major Items of Equipment | | | | | |
| Assistant Secretary for Energy Efficiency | | | | | (0) |
| and Renewable Energy | - | - | - | - | (0) |
| Office of Science | (4,949) | (13,074) | (1) | (1) | (1) |
| Total DOE Capital Equipment | (4,949) | (13,074) | (1) | (1) | (1) |
| GENERAL PLANT PROJECTS | | | | | |
| Office of Science | - | - | - | (O) | - |
| ACCELERATOR IMPROVEMENT PROJECTS | | | | | |
| Office of Science | - | - | - | (0) | - |
| LINE-ITEM CONSTRUCTION | | | | | |
| Assistant Secretary for Energy Efficiency | | _ | _ | | (0) |
| and Renewable Energy | | _ | _ | _ | (0) |
| Office of Science | - | (0) | (0) | - | - |
| Total DOE Plant | - | (0) | (0) | (0) | (0) |
| TOTAL DOE PLANT AND CAPITAL EQUIPMENT | (4,949) | (13,074) | (1) | (1) | (1) |
| TOTAL LABORATORY | 13,898 | 4,935 | 2,662 | 1,467 | 208 |

⁽a) Portion of High Performance Network Facilities funding reobligated from Capital Equipment to Operating in FY2011 and FY2012.

⁽b) Total funding for Integrated Contractors is assumed to be equal to cost incurred.

Table 3.2

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

| Berkeley Lab Spending Trends by Funding Source (\$K) | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 |
|---|---------|--------|--------|--------|--------|
| OPERATING | ' | | | | |
| Advanced Research Projects Agency - Energy | 1,966 | 1,956 | 1,179 | 109 | - |
| Assistant Secretary for Energy Efficiency | 11.853 | 8,109 | 4,001 | 3,575 | 3,356 |
| and Renewable Energy | 11,000 | 0,107 | 4,001 | 3,3/3 | 3,336 |
| Assistant Secretary for Fossil Energy | 1,314 | 2,345 | 927 | 151 | _ |
| Office of Electricity Delivery and Energy Reliability | 589 | 327 | 525 | 491 | 413 |
| Office of Science | 36,484 | 28,101 | 12,268 | 1,640 | 865 |
| Total Operating | 52,206 | 40,838 | 18,902 | 5,965 | 4,633 |
| OTHER DIRECT OPERATING | | | | | |
| Federal Agencies | 7,181 | 1,701 | 13 | 3 | - |
| Non Federal Sponsors | 2,927 | 1,904 | 1,613 | 169 | 97 |
| DOE Integrated Contractors | 1,924 | 2,198 | 1,529 | 1,398 | 837 |
| Total Other Direct Operating | 12,032 | 5,803 | 3,154 | 1,570 | 934 |
| TOTAL OPERATING | 64,238 | 46,642 | 22,056 | 7,535 | 5,568 |
| DOE PLANT AND CAPITAL EQUIPMENT | | • | | | |
| Basic Equipment/Major Items of Equipment | | | | | |
| Assistant Secretary for Energy Efficiency | 3,195 | 876 | 628 | | |
| and Renewable Energy | 3,173 | 0/0 | 020 | - | _ |
| Office of Science | 19,781 | 9,339 | 476 | - | _ |
| Total Capital Equipment | 22,977 | 10,215 | 1,104 | - | - |
| General Plant Projects | | | | | |
| Office of Science | 357 | 2,141 | 541 | - | - |
| Accelerator Improvement Projects | | | | | |
| Office of Science | 1,837 | 2,212 | 2,567 | - | - |
| Line-Item Construction | | | | | |
| Assistant Secretary for Energy Efficiency | 1,151 | 2,036 | 8,262 | 3,991 | 170 |
| and Renewable Energy | 1,131 | 2,036 | 0,202 | 3,771 | 170 |
| Office of Science | 10,685 | 1,431 | - | - | |
| Total DOE Plant | 14,029 | 7,820 | 11,370 | 3,991 | 170 |
| TOTAL DOE PLANT AND CAPITAL EQUIPMENT | 37,006 | 18,035 | 12,474 | 3,991 | 170 |
| TOTAL LABORATORY | 101,244 | 64,677 | 34,530 | 11,526 | 5,738 |
| Note: Minor variances may occur due to rounding. | | | | | |



Figure 3.1

Where Did Your ARRA Program Dollars Go in FY2015?

| Expenses | DOE Operating Costs | DOE Integrated Contractors Costs | Construction and Equipment | Non-DOE |
|--------------------------------|---------------------|-------------------------------------|-------------------------------|---------|
| DIRECT | | | | |
| Direct Labor | | | | |
| Labor (a) | \$0.20 | \$0.09 | \$0.39 | \$0.54 |
| Contract Labor | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Organization/ALD Burden (b) | \$0.03 | \$0.02 | \$0.07 | \$0.10 |
| Subtotal Direct Labor | \$0.23 | \$0.10 | \$0.46 | \$0.64 |
| Other Direct | • | | | |
| Services | \$0.58 | \$0.77 | \$0.39 | \$0.00 |
| Materials | \$0.00 | \$0.01 | \$0.00 | \$0.00 |
| Utilities | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Other Expenses (c,e) | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Recharges (b,d,e) | \$0.02 | \$0.01 | \$0.00 | \$0.00 |
| Travel | \$0.01 | \$0.01 | \$0.00 | \$0.00 |
| Subtotal Other Direct | \$0.61 | \$0.79 | \$0.40 | \$0.00 |
| Total Direct | \$0.84 | \$0.89 | \$0.86 | \$0.64 |
| INDIRECT | | | | |
| Procurement | \$0.02 | \$0.03 | \$0.03 | \$0.00 |
| Travel | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| G&A (Other Inst.) | \$0.14 | \$0.08 | \$0.12 | \$0.36 |
| Total Indirect | \$0.16 | \$0.11 | \$0.14 | \$0.36 |
| TOTAL EXPENSES | \$1.00 | \$1.00 | \$1.00 | \$1.00 |

- (a) Labor includes salary and benefits for Scientists/Engineers, Admin., Students/GSRA's and Campus Labor.
- (b) Distributed activities used by direct funded programs. ALD Burden implemented at beginning of FY2013.
- (c) Includes misc. expenses (stipends, sales tax, freight, etc.).
- (d) Includes recharges credited back to direct operating accounts such as ALS and ESnet.
- (e) Safeguards and Securities costs moved from Other Expenses to Recharges for FY2013 report.

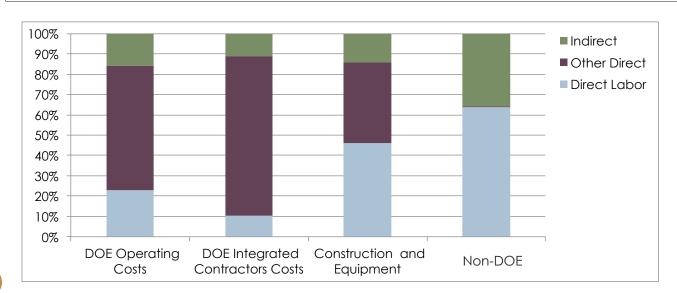


Table 3.3

FY2015 ARRA Funding and Costs by DOE Programs (\$K)

| | Office of Science ARRA | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|---------|---|---------------------------------------|-----------------|-----------------|---|
| OPERA | TING: | | | | |
| KA14 | Theoretical Physics | 330 | (0) | 330 | - |
| KA15 | Advanced Technology R&D (prior to restructure) | 0 | (0) | - | - |
| KB03 | Nuclear Theory | 155 | (0) | 155 | - |
| KC02 | Materials Sciences and Engineering | 379 | (0) | 379 | - |
| KJ04 | Mathematical, Computational, and Computer Sciences Research | 58 | (58) | - | - |
| Total C | perating | 923 | (59) | 865 | - |
| CAPITA | AL EQUIPMENT: | | | | |
| KA15 | Advanced Technology R&D (prior to restructure) | 1 | (1) | - | - |
| Total C | Capital Equipment | 1 | (1) | • | - |
| GENER | AL PLANT PROJECTS: | | | | |
| KG09 | General Plant Projects | - | - | - | - |
| Total G | General Plant Projects | - | - | • | - |
| ACCE | LERATOR IMPROVEMENT PROJECTS: | | | | |
| KC02 | Materials Sciences and Engineering | - | - | - | - |
| Total A | accelerator Improvement Projects | - | - | - | - |
| LINE IT | EM CONSTRUCTION: | | | | |
| 39KG | Science Laboratories Infrastructure | - | - | - | - |
| Total L | ine Item Construction | - | - | - | - |
| TOTAL | OFFICE OF SCIENCE ARRA | 924 | (59) | 865 | - |



FY2015 ARRA Funding and Costs by Other Direct Operating Source (\$K)

| Funding Source | FY2015 Beginning Uncosted Obligations | FY2015 Funds | FY2015 Costs | FY2015 Ending Uncosted Obligations |
|---|---------------------------------------|-----------------|-----------------|--|
| REIMBURSABLE WORK | | | | |
| Federal Agencies | | | | |
| Other Energy Related Activities | 48 | 50 | 97 | - |
| Total Federal Agencies | 48 | 50 | 97 | - |
| Non-Federal Agencies | | | | |
| Industry | - | - | - | - |
| Universities and Institutes | - | - | - | - |
| Total Non-Federal Agencies | - | - | - | - |
| TOTAL REIMBURSABLE | 48 | 50 | 97 | - |
| DOE INTEGRATED CONTRACTORS | | | | |
| Work Performed for Other DOE Locations (a) | - | 837 | 837 | - |
| Total DOE Integrated Contractors | - | 837 | 837 | - |
| TOTAL OTHER DIRECT OPERATING | 48 | 887 | 934 | - |
| Note: Minor variances may occur duet to rounding (a) Total funding for DOE Integrated Contractors is assumed to be equal | to cost incurred. | | | |

Table 3.5

ARRA Cost Trends by Expense Category, FY2011-FY2015 (\$M and % of Total)

| Firmanaa | FY | 2011 | FY2 | 012 | FY | 2013 | FY | 2014 | FY2 | 2015 |
|-----------------------------|-------|--------|------|--------|------|--------|------|--------|-----|--------|
| Expenses | \$M | % | \$M | % | \$M | % | \$M | % | \$M | % |
| DIRECT | | | | | | | | | | |
| Direct Labor | | | | | | | | | | |
| Labor (a) | 18.0 | 17.8% | 12.9 | 19.9% | 7.2 | 20.8% | 2.0 | 17.0% | 1.1 | 19.2% |
| Contract Labor | 0.0 | 0.0% | 0.1 | 0.1% | 0.1 | 0.1% | 0.0 | 0.2% | 0.0 | 0.0% |
| Organization/ALD Burden (b) | 3.0 | 2.9% | 2.2 | 3.3% | 1.2 | 3.4% | 0.3 | 2.9% | 0.2 | 3.4% |
| Subtotal Direct Labor | 21.0 | 20.7% | 15.1 | 23.3% | 8.4 | 24.4% | 2.3 | 20.1% | 1.3 | 22.6% |
| OTHER DIRECT | | | | | | | | | | |
| Services | 47.5 | 46.9% | 22.5 | 34.8% | 15.6 | 45.0% | 7.9 | 69.2% | 3.4 | 59.3% |
| Materials | 18.5 | 18.3% | 16.9 | 26.1% | 5.1 | 14.8% | 0.1 | 1.2% | 0.0 | 0.4% |
| Utilities | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% |
| Other Expenses (c,e) | 0.2 | 0.2% | 0.2 | 0.3% | 0.0 | 0.1% | -0.5 | -4.4% | 0.0 | 0.0% |
| Recharges (b,d,e) | 1.0 | 1.0% | 0.8 | 1.2% | 0.4 | 1.3% | 0.1 | 1.2% | 0.1 | 1.7% |
| Travel | 0.6 | 0.6% | 0.4 | 0.7% | 0.2 | 0.6% | 0.1 | 1.2% | 0.0 | 0.7% |
| Subtotal Other Direct | 67.8 | 67.0% | 40.8 | 63.1% | 21.3 | 61.7% | 7.8 | 68.4% | 3.6 | 62.1% |
| Total Direct | 88.8 | 87.7% | 55.9 | 86.5% | 29.7 | 86.1% | 10.1 | 88.5% | 4.9 | 84.6% |
| INDIRECT | | | | | | | | | | |
| Procurement | 1.5 | 1.5% | 1.1 | 1.6% | 0.6 | 1.7% | 0.1 | 0.9% | 0.1 | 1.9% |
| Travel | 0.1 | 0.1% | 0.1 | 0.1% | 0.0 | 0.1% | 0.0 | 0.1% | 0.0 | 0.1% |
| G&A (Other Inst.) | 10.9 | 10.7% | 7.6 | 11.8% | 4.2 | 12.1% | 1.2 | 10.4% | 0.8 | 13.4% |
| Total Indirect | 12.4 | 12.3% | 8.8 | 13.5% | 4.8 | 13.9% | 1.3 | 11.5% | 0.9 | 15.4% |
| TOTAL EXPENSES | 101.2 | 100.0% | 64.7 | 100.0% | 34.5 | 100.0% | 11.5 | 100.0% | 5.7 | 100.0% |

⁽a) Labor includes salary and benefits for Scientists/Engineers, Admin., Students/GSRAs and Campus Labor.

⁽b) Distributed activities used by direct funded programs.

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

⁽d) Includes recharges credited back to direct operating accounts such as ALS and ESnet.

⁽e) Safeguards and Securities costs moved from Other Expenses to Recharges for FY2013 report.



ARRA Job Reporting

| DOE DIRECT ARRA Projects | Lif | e-to-Date Jobs | |
|--|---------|----------------|---------|
| DOL DIRECT ARRA PROJECTS | Created | Retained | Total |
| Total DOE Direct ARRA Projects | 354.0 | 1,534.4 | 1,888.4 |
| Total Other Direct Operating ARRA Projects (a) | 92.7 | 35.7 | 1,888.4 |
| Toldi Olliei Dilect Operdillig Akka Plojecis (d) | 72.7 | 35.7 | 120.5 |
| BERKELEY LAB TOTAL | 446.7 | 1,570.2 | 2,016.9 |
| | | · | |
| DOE DIRECT ARRA PROJECTS | | | |
| ALS User Support Building | 5.2 | 106.0 | 111.3 |
| GPP, Upgrade Bldg 62 | 4.7 | 32.2 | 36.9 |
| GPP, Upgrade Bldg 66 | 2.6 | 19.5 | 22.1 |
| GPP, Air Handling Equipment | 0.9 | 11.2 | 12.1 |
| GPP, Upgrade Bldg 2 | 2.0 | 18.4 | 20.4 |
| GPP, Modernize Transformer | 4.5 | 8.6 | 13.1 |
| Bevatron Demolition | - | 22.7 | 22.7 |
| Seismic Phase 2, 09-SC-72 | 7.5 | 130.3 | 137.8 |
| Adv. Plasma Accel. Facility. (BELLA) | 25.3 | 34.5 | 59.8 |
| Nuclear Data Program Init. | - | 4.3 | 4.3 |
| Enh AIP Funding, Injector | 6.9 | 1.0 | 7.9 |
| Fed Lab Support for ARRA Trans | 1.1 | - | 1.1 |
| HEP-Adv Tech R&D Augmentation(Magnets) | 7.1 | 6.0 | 13.1 |
| Nanoscale Science Rsrch Centrs | 0.6 | 25.6 | 26.2 |
| Enh AIP Funding, RF Amplifier | 0.9 | - | 0.9 |
| Energy Frontier Research Cntrs | 0.5 | - | 0.5 |
| HEDLP NDCX-II | 23.4 | 33.7 | 57.1 |
| ALS Beamline Detectors | 5.6 | 1.1 | 6.7 |
| ALS Slice Beamline EPU | 6.3 | 1.8 | 8.0 |
| ALS Sextupoles Magnets | 16.3 | 2.3 | 18.6 |
| ALS High Field Vector Magnet | 3.1 | 5.8 | 8.9 |
| ARPA-E Early Harvest Solict. | 0.1 | - | 0.1 |
| Joint Genome Institute | - | 102.5 | 102.5 |
| Joint BioEnergy Institute | 0.0 | 39.8 | 39.8 |
| Advanced Networking Initiative | 19.5 | 547.7 | 567.2 |
| Comp. Partnerships (SciDAC-e) | 3.2 | 1.1 | 4.4 |
| Enhance FEMP Service Function | 4.5 | 1.3 | 5.7 |
| Berkeley Lab Magellan Cloud Computing | 10.4 | 102.1 | 112.4 |
| Climate 100 - ESG to 100 Gbps | 1.2 | - | 1.2 |
| Petascale Initiative | 18.3 | - | 18.3 |
| Enhanced Geothermal Systems (EGS) with C02 as Heat Transmission Fluid | 1.8 | 3.7 | 5.5 |
| Coupled Thermal-Hydrological-Mechanical-Chemical Model and Experiments for Optimization of Enhanced Geothermal System Development and Production | 4.5 | 0.5 | 5.0 |
| Note: Minor variances may occur due to rounding. (a) Other Direct Operating includes Work for Others, Federal Sponsors, Non-Federal Sp | oonsors | | |

(a) Other Direct Operating includes Work for Others, Federal Sponsors, Non-Federal Sponsors.

Table 3.6

ARRA Job Reporting Continued

| | Lif | e-to-Date Jobs | | |
|---|---------|----------------|---------|--|
| DOE DIRECT ARRA Projects | Created | Retained | Total | |
| Fluid Imaging of Enhanced Geothermal Systems through Joint 3D Geophysical Inverse Modeling | 4.4 | 0.8 | 5.2 | |
| Integrated Approach to Use Natural Chemical and Isotopic Tracers to Estimate Fracture Spacing and Surface Area in EGS Systems | 6.2 | - | 6.2 | |
| National Accounts Acceleration in Support of Commercial Building Initiative | 12.4 | 8.5 | 20.9 | |
| Smart Grid Investment Grant Program | 5.3 | 3.0 | 8.3 | |
| Hospital Energy Benchmarking SysDev | 0.7 | 0.1 | 0.8 | |
| Incorporating EE into Commercial Mortgage Underwriting | 1.2 | 4.5 | 5.8 | |
| Northern California CO2 Reduction Project | 0.6 | - | 0.6 | |
| Builders Challenge and Existing Home Retrofits | 7.0 | 7.1 | 14.1 | |
| Advanced Biofuels PDU-Bioenergy Research Center Collaboration | 3.3 | 97.1 | 100.4 | |
| Deep Exploratory Test well for CO2 Sequestration purposes, Newark Basin-Southern New York and New Jersey | 2.9 | 0.7 | 3.6 | |
| Residential Home Retrofit Support & Research | 6.2 | - | 6.2 | |
| Home Retrofits Rating Support | 7.7 | 0.3 | 8.1 | |
| Residential Building Home Retrofit Analysis | 0.7 | 0.6 | 1.3 | |
| User Facility for Low Energy Integrated Buildings Systems Research (UTBF) | 11.5 | 102.5 | 114.0 | |
| High Energy Physics- Early Career Research Program | 11.3 | - | 11.3 | |
| Basic Energy Sciences- Early Career Research Program | 10.6 | 0.2 | 10.8 | |
| Nuclear Physics-Early Career Research Program | 10.9 | 0.5 | 11.4 | |
| NP-3D Gamma ray Imaging Technologies | 3.7 | - | 3.7 | |
| ASCR-Comp Partnerships- SciDAC-e-PERC-3-Enhancing Productivity of Materials Discovery computation for Solar fuels and Next Gen. Autotuning Large Computational codes. | 2.2 | 6.2 | 8.5 | |
| Visualization and Analytics Center for Enabling Technologies-VACET | 3.6 | - | 3.6 | |
| Applied Partial Differential Equations Center for Enabling Technologies(APDEC) | 3.2 | 1.9 | 5.0 | |
| Towards Optimal Petascale Simulations-TOPS-SciDAC-e | 2.7 | - | 2.7 | |
| EE Technical Assistance | 0.5 | - | 0.5 | |
| Development of an Integrated Microbial-ElectroCatalytic (MEC) System for Liquid Biofuel Production from CO2 | 8.0 | 1.9 | 10.0 | |
| High Throughput Discovery of Robust Metal Organic Frameworks for CO2 capture | 11.3 | 2.9 | 14.2 | |
| ARRA Evaluation | 1.6 | 20.1 | 21.7 | |
| Berkeley Lab ARRA Bridge - Evaluation Support | 1.1 | 10.2 | 11.3 | |
| Industrial Carbon Capture & Storage: Joint Inversion of Monitoring Data for Early Leakage Detection | 9.3 | 1.4 | 10.7 | |
| Carbon Capture Simulation initiative-Industrial Carbon Capture and Storage | 6.3 | - | 6.3 | |
| Online Training tool-Weatherization Training and Technical Assistance | 5.4 | 0.3 | 5.7 | |
| ARPA E- Hydrogen-Bromine Flow Batteries for Grid-Scale Energy Storage | 4.2 | - | 4.2 | |
| Total DOE Direct ARRA Projects | 354.0 | 1,534.4 | 1,888.4 | |



ARRA Job Reporting Continued

| Other Direct Operating ARRA Projects (a) | | ife-to-Date Jobs | | |
|--|-----------------|------------------|---------------|--|
| Other Direct Operating ARRA Projects (a) | Jobs Created | Jobs Retained | Total Jobs | |
| PHENIX FVTX Sensor Backplanes | 1.2 | - | 1.2 | |
| PHENIX Station Disks | 0.0 | - | 0.0 | |
| Evaluating Benefits of Advanced Metering Infrastructure, Smart Meters and Time-Varying Tariffs | 0.9 | - | 0.9 | |
| Knowledgebase R&R Pilot Project | 1.8 | - | 1.8 | |
| Knowledge Fusion and Data-Supported Deep Annotation for Reconstruction of Metabolism | - | 1.2 | 1.2 | |
| Technical Support for the ARRA Technical Assistance Project (TAP) | 2.1 | - | 2.1 | |
| Optics characterization for LCLS CXI and NIF SXI projects | 0.1 | - | 0.1 | |
| Determining Technetium Speciation Using X-ray Absorption Fine Structure (XAFS) | 0.1 | - | 0.1 | |
| Smart Grid Consumer Behavior Study Data Processing | 0.4 | - | 0.4 | |
| Interregional Electricity Reliability Issue Assessment and Analysis | 1.3 | 3.5 | 4.7 | |
| Area of Interest 2: New Technologies, Electricity Demand, and Utility Resource Plans | 5.0 | 1.1 | 6. | |
| Technical Assistance to Electric Infrastructure Planners on Other Subjects | 0.9 | 0.0 | 0.9 | |
| A Distributed Intelligence Automated Demand Response Building Management System | 1.1 | - | 1.1 | |
| Energy-Efficient and Comfortable Buildings through Multivariate Integrated Control (ECOMIC) | 1.8 | - | 1.8 | |
| Wireless Modular Dimming Lighting Control System | 0.7 | - | 0 | |
| Development of High Rate Sequential Coatings for Low Cost Electrochromic Glass | 1.2 | - | 1.2 | |
| ARRA Performance Tracking Metrics | 1.2 | 0.1 | 1.4 | |
| IWO - Battaglia | - | - | | |
| Automated Continuous Commissioning of Commercial Buildings | 1.4 | 0.2 | 1.0 | |
| Red Cell Band 4.1Developmental Changes in RNA Splicing | 2.6 | 2.0 | 4.0 | |
| Red Cell Band 4.1 - Developmental Changes in RNA Splicing | 3.3 | - | 3.3 | |
| Age of Onset and Huntingtons Disease | 2.6 | 0.3 | 3.0 | |
| Age of Onset and Huntingtons Disease | 3.3 | - | 3.3 | |
| In Vivo Analysis of a Noncoding Susceptibility Region for Coronary Artery Disease | 3.5 | - | 3.5 | |
| The Berkeley Cancer Genome Center | - | 0.8 | 0.0 | |
| Accelerating Cancer Research with Single Cell Arrays | 0.1 | 0.8 | 0.9 | |
| ARRA Development of the Cell Ontology in Support of the Gene Ontology | 2.1 | - | 2. | |
| Self-healing Composites via Novel Biomolecular Design and Processing | 2.4 | - | 2.4 | |
| MT Function and Dysfunction in Single Neurons in Vivo | 4.7 | 0.2 | 4.9 | |
| Comprehensive characterization of the Drosophila transcriptome | 0.5 | 2.3 | 2.8 | |
| Beamline Automation for Structure Determination | 0.8 | 0.7 | 1.3 | |
| Bay Area Breast Cancer and the Environment Research Center | 0.9 | - | 0.9 | |
| Mapping Anti-Cancer Drugs Using Advanced X-Ray Microanalysis | 0.2 | - | 0.2 | |
| ARRA Gene Ontology Consortium | 1.6 | - | 1.0 | |
| Genome-Wide Mapping of Chromosomal Proteins in Drosophilia | 0.1 | 4.8 | 4.8 | |
| Note: Minor variances may occur due to rounding. | | | | |

(a) Other Direct Operating includes Work for Others, Federal Sponsors, Non-Federal Sponsors.

ARRA Job Reporting Continued

| | L | Life-to-Date Jobs | | | | |
|--|-----------------|-------------------|---------------|--|--|--|
| Other Direct Operating ARRA Projects (a) | Jobs Created | Jobs Retained | Total Jobs | | | |
| Generation of an In vivo Human Genome Transcriptional Enhancer Dataset | 1.2 | - | 1.2 | | | |
| Matrix- Based Mineral (MBM) Enamel Biomimetics | 1.0 | - | 1.0 | | | |
| Integrated nanoparticle characterization and toxicity assessment | 0.1 | - | 0.1 | | | |
| Integrated nanoparticle characterization and toxicity assessment | 0.1 | - | 0.1 | | | |
| Biomimetic Actinide Decorporation: Characterization and Preclinical Development | 9.5 | 9.2 | 18.7 | | | |
| Manipulating b1 integrin to enhance radiation therapy for breast cancer | 0.6 | 1.5 | 2.1 | | | |
| Non-B DNA Structure with Chemical Carcinogens | 0.0 | 1.6 | 1.6 | | | |
| STCI: Middleware for Monitoring and Troubleshooting of Large-Scale Applications on National Cyberinfrastructure | 3.7 | - | 3.7 | | | |
| PHENIX: new methods for automation in macromolecular crystallography | 0.3 | 2.0 | 2.2 | | | |
| Mismatch Repair and DNA Expansion | 0.8 | - | 0.8 | | | |
| Materials for Green Engineering of Urban Areas | 0.0 | - | 0.0 | | | |
| Production of Advanced Coatings for Solar Cells | 0.1 | - | 0.1 | | | |
| Multidimensional Electrofocusing on Gradient Monoliths | 0.7 | - | 0.7 | | | |
| A metagenomic study of the Hoatzin crop microbes to reveal novel carbohydrate-active enzymes | - | - | - | | | |
| National Institute for Computational Sciences (NICS) NSF Center for Remote Data Analysis and Visualization | 4.2 | - | 4.2 | | | |
| llind Geothermal System Exploration in Active Volcanic Environments; Multi-phase Geophysical and Geochemical Surveys in Overt and Subtle Volcanic Systems, Hawaii and Maui | | - | 0.5 | | | |
| In-situ protein-protein interaction network isPIN study | 0.1 | - | 0.1 | | | |
| In-situ protein-protein interaction network isPIN study | 0.4 | - | 0.4 | | | |
| Toward the Understanding of Induced Seismicity in Enhanced Geothermal Systems | 1.1 | - | 1.1 | | | |
| Experiment-Based Model for the Chemical Interactions between Geothermal Rocks, Supercritical Carbon Dioxide and Water | 2.3 | - | 2.3 | | | |
| Development of Advanced Thermal-Hydrological-Mechanical-Chemical (THMC) Modeling Capabilities for Enhanced Geothermal Systems | 1.1 | - | 1.1 | | | |
| A New Analytic-adaptive model for EGS assessment, development and management support | 1.2 | - | 1.2 | | | |
| Optimized Drilling and Completion of Abrasive Slurry Jet Microhole Arrays for Efficient Exploitation of Enhanced Geothermal Systems | 2.0 | - | 2.0 | | | |
| Geochemistry and THMC Models for the Newberry EGS Project | 1.3 | - | 1.3 | | | |
| Characterizing Fractures in Geysers Geothermal Field by Micro-seismic Data, Using Soft Computing, Fractals, and Shear Wave Anisotropy | 0.5 | - | 0.5 | | | |
| THMC Modeling of EGS Reservoirs - Continuum through Discontinuum Representations | 0.6 | - | 0.6 | | | |
| Modeling Li Distribution and its Effect on Anode Protection Layers | 2.3 | - | 2.3 | | | |
| TCGA Data Analysis Center at Berkeley | 2.4 | - | 2.4 | | | |
| Note: Minor variances may occur due to rounding. (a) Other Direct Operating includes Work for Others, Federal Sponsors, Non-Federal Spor | nsors. | | | | | |



ARRA Job Reporting Continued

| | L | ife-to-Date Jobs | | |
|--|-----------------|------------------|---------------|--|
| Other Direct Operating ARRA Projects (a) | Jobs Created | Jobs Retained | Total Jobs | |
| Enabling Novel Cathode Electrode Design with Integrated Separator and Manufacturing Toolset for High Energy Prismatic Li-ion Battery Cells | 2.9 | - | 2.9 | |
| Development of an 8kx8k pixel direct detection CMOS camera with single electron counting for cryoEM | - | - | - | |
| Automated Continuous Commissioning of Commercial Buildings | 0.3 | - | 0.3 | |
| Research Services Program - Geochemistry | 0.1 | - | 0.1 | |
| TCGA Data Analysis Center at Berkeley | 0.8 | 0.2 | 1.0 | |
| Innovative Building-Integrated Enthalpy Recovery | 0.4 | - | 0.4 | |
| Novel Functions for Red Cell Proteins Lu and LW | 0.0 | 3.3 | 3.3 | |
| Support of the SSA National Support Center Project | 0.1 | - | 0.1 | |
| Total Other Direct Operating ARRA Projects (a) | 92.7 | 35.7 | 128.5 | |
| Total DOE Direct ARRA Projects | 354.0 | 1,534.4 | 1,888.4 | |
| BERKELEY LAB TOTAL | 446.7 | 1,570.2 | 2,016.9 | |
| Nickey Adia any continue and property and active the very relief | | | | |

⁽a) Other Direct Operating includes Work for Others, Federal Sponsors, Non-Federal Sponsors.

4. INDIRECT BUDGETS



Figure 4.1

Indirect Budgets — FY2015 Costs (\$M)

| Indirect Budgets (a) | FY2015 Costs (\$M) |
|-----------------------------|--------------------|
| G&A (Includes Site Support) | 178.4 |
| ALD & Organizational Burden | 53.7 |
| Service Centers (b) | 44.8 |
| LDRD | 24.8 |
| Procurement | 13.1 |
| IGPP | 4.5 |
| Travel | 1.2 |
| Other (c) | 0.2 |
| Total | 320.7 |

- (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 FY2015, LDRD cost includes \$7.5M G&A assessed on LDRD projects.
- (b) Service Centers includes recharge cost centers that default to B&R YN01 (project type OHRCH) only.
- (c) Includes: Office of Homeland Security Charge.

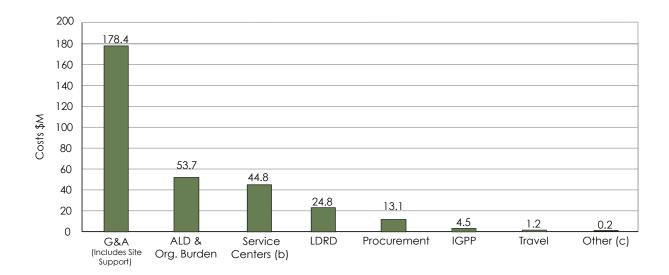
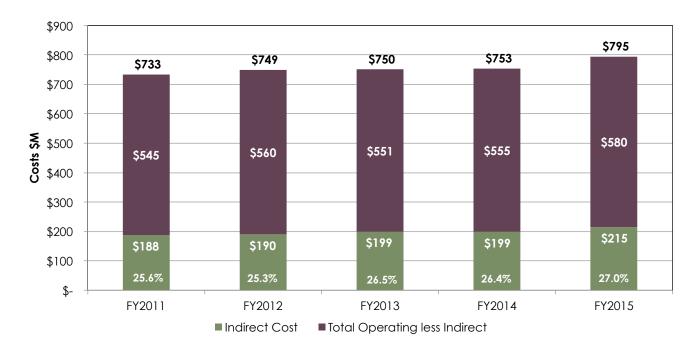


Figure 4.2

Institutional Overhead Costs as a Percent of Operating Costs, FY2011-FY2015



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

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



Table 4.1

Institutional Costs by Division, FY2015 (\$K)

| Division | G&A (a) | LDRD (b) | Procurement | Travel | IGPP | Total |
|---------------------------------------|---------|----------|-------------|--------|-------|---------|
| Lab Directorate | 17,172 | | | | | 17,172 |
| LDRD | | 24,777 | | | | 24,777 |
| Engineering | 2,637 | | | | | 2,637 |
| Earth Sciences | 5 | | | | | 5 |
| Associate Lab Director for Operations | | | | | | |
| ALD Office | 2,186 | | | | | 2,186 |
| Office of Institutional Assurance | 1,883 | | | | | 1,883 |
| IGPP | | | | | 4,505 | 4,505 |
| Non-Cap | 10,203 | | | | | 10,203 |
| Diversity & EEO/AA | 483 | | | | | 483 |
| Public Affairs | 2,969 | | | | | 2,969 |
| HR | 8,424 | | | | | 8,424 |
| Environmental/Health/Safety | 21,792 | | | | | 21,792 |
| Protective Services | 11,448 | | | | | 11,448 |
| Facilities | 50,827 | | 1,866 | | | 52,693 |
| OCFO | 11,388 | | 11,223 | 1,173 | | 23,784 |
| IT | 30,407 | | | | | 30,407 |
| General Lab | 6,613 | | | | | 6,613 |
| Total | 178,437 | 24,777 | 13,089 | 1,173 | 4,505 | 221,981 |

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

⁽b) LDRD costs include \$7.5M of G&A assessment.

Table 4.2

Institutional FTEs Charged by Division, FY2015

| Division | G&A (a) | LDRD | Procurement | Travel | IGPP | Total |
|---------------------------------------|---------|-------|-------------|--------|------|-------|
| Lab Directorate (a) | 66.1 | | | | | 66.1 |
| LDRD | | 107.0 | | | | 107.0 |
| Engineering | 8.8 | | | | | 8.8 |
| Associate Lab Director for Operations | | | | | | |
| ALD Office | 7.1 | | | | | 7.1 |
| Office of Institutional Assurance | 10.1 | | | | | 10.1 |
| IGPP | | | | | 3.7 | 3.7 |
| Non-Cap | 8.2 | | | | | 8.2 |
| Diversity & EEO/AA | 2.7 | | | | | 2.7 |
| Public Affairs | 16.3 | | | | | 16.3 |
| HR | 46.1 | | | | | 46.1 |
| Environmental/Health/Safety | 93.9 | | | | | 93.9 |
| Protective Services | 23.2 | | | | | 23.2 |
| Facilities | 142.9 | | 13.8 | | | 156.7 |
| OCFO | 66.4 | | 66.7 | 6.9 | | 140.0 |
| IT | 85.2 | | | | | 85.2 |
| General Lab | - | | | | | - |
| Total | 576.9 | 107.0 | 80.5 | 6.9 | 3.7 | 775.0 |

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

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



Figure 4.3

Payroll Burden Summary (\$M)

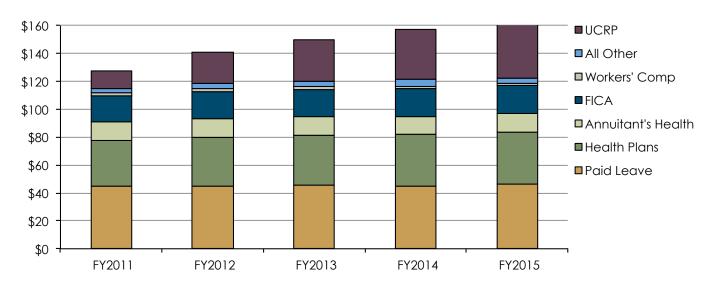


Figure 4.4

Gross Payroll Summary (\$M)

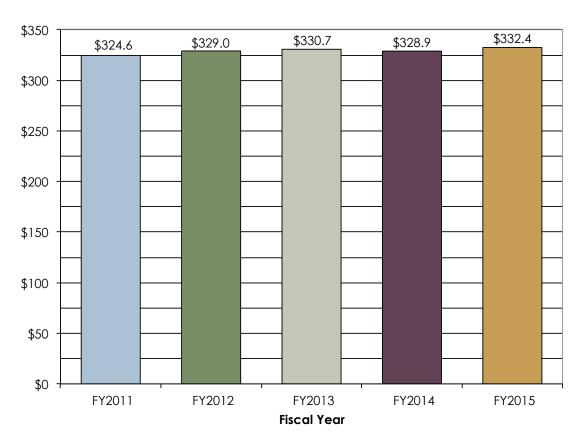


Table 4.3

Organizational Burden Costs and FTEs

Organizational burden includes costs for the management and supervision of division/department activities and is distributed over labor costs including campus and contract labor.

| Accelerator Technology & Applied Physics Advanced Light Source | Cost \$K | Avg FTE |
|--|----------|---------|
| | 1.649 | |
| Advanced Light Source | ., | 8.7 |
| | 2,387 | 11.1 |
| Chemical Sciences | 1,912 | 10.9 |
| Computational Research (a) | 4,015 | 19.0 |
| Engineering | 4,967 | 23.9 |
| Earth Sciences | 4,310 | 19.0 |
| Facilities | 4,533 | 20.9 |
| Genomics - Onsite | 586 | 3.6 |
| Information Technology | 2,713 | 11.6 |
| Life Sciences | 3,607 | 24.3 |
| Materials Sciences | 3,899 | 20.7 |
| National Energy Research Scientific Computing Center (a) | 1,792 | 12.8 |
| Nuclear Sciences | 1,838 | 10.6 |
| Physical Biosciences | 3,504 | 20.2 |
| Physics | 1,951 | 12.0 |
| Scientific Networking (a) | 541 | 4.6 |
| Total | 44,204 | 233.7 |

Associate Lab Directorate (ALD) Burden Costs and FTEs

Associate Lab Directorate burden includes costs for the management and supervision of ALD activities and is distributed over labor costs including campus and contract labor.

| Avery Cost Deele | FY20 | FY2015 | | |
|--|----------|---------|--|--|
| Area Cost Pools | Cost \$K | Avg FTE | | |
| Biosciences | 929 | 2.7 | | |
| Computing Sciences | 187 | 0.6 | | |
| Physical Sciences | 380 | 1.3 | | |
| Energy Technologies Area | 7,427 | 35.9 | | |
| Energy Sciences | 531 | 2.7 | | |
| Total | 9,453 | 43.2 | | |
| Note: Minor Variances may occur due to rounding. | | | | |



Table 4.4

Service Center Costs and FTEs

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

| Division (a) | FY2 | FY2015 | | |
|----------------------------------|----------|---------|--|--|
| Division (a) | Cost \$K | Avg FTE | | |
| OCFO - Property Storage Recharge | 58 | 0.1 | | |
| Computing Sciences | 1,327 | - | | |
| Energy Technologies Area | 2,869 | 20.4 | | |
| Engineering | 1,345 | 6.3 | | |
| Earth Sciences | 52 | 0.2 | | |
| Facilities | 13,610 | 2.5 | | |
| Genomics (JGI) | 5,581 | 7.6 | | |
| Information Technology | 6,643 | 16.0 | | |
| Life Sciences | 725 | 4.5 | | |
| Materials Sciences | 272 | 1.3 | | |
| Physical Biosciences | 8,348 | 17.6 | | |
| ALD Operations (b) | 3,982 | 6.9 | | |
| Total | 44,812 | 83.2 | | |

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

⁽b) Includes: GSRA pass through costs.

Table 4.5

Distributed Recharges by Resource Category Trends, FY2011-FY2015 (\$K)

| Distributed Recharge (a, b) | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 |
|---|--------|--------|--------|--------|--------|
| Vehicle | 991 | 829 | 759 | 859 | 864 |
| MSD Facility | 246 | 331 | 259 | 250 | 272 |
| Animal Care | 744 | 720 | 665 | 640 | 659 |
| Creative Services | 2,010 | 1,511 | 1,507 | 1,233 | 919 |
| FAM Facility Recharge | | | 75 | 104 | 78 |
| ESD Sample Analysis Recharge | | | 131 | 49 | 69 |
| Warehouse Storage Recharge | | 51 | 128 | 100 | 96 |
| 88-Inch Accelerator Operations | 452 | 562 | 720 | 511 | 1,026 |
| JBEI Non-Material Recharge | 288 | 869 | 946 | 931 | 1,335 |
| JBEI Material Recharge | 4,034 | 4,095 | 4,845 | 5,162 | 5,270 |
| BCSB | | | | 1,325 | 1,568 |
| Telephone Services | 5,064 | 5,637 | 5,318 | 5,406 | 5,200 |
| EETD Recharge | 1,784 | 2,132 | 2,149 | 2,524 | 2,802 |
| Molecular Foundry | 213 | | | | |
| Computer/Net Recharges | 2,244 | 2,258 | 1,913 | 1,683 | 1,584 |
| Flexlab Recharge | | | | 40 | 60 |
| Engineering Shop | 918 | 878 | 884 | 729 | 656 |
| CAD | 731 | 717 | 794 | 728 | 731 |
| ALS Proprietary Recharge | 646 | 823 | 617 | 576 | 809 |
| JGI Recharge (Capillary Sequencing) (c) | 27 | 15 | | | |
| JGI Administrative Charge (d) | 260 | 68 | | | |
| ESnet Recharge | 1,192 | 822 | 310 | 294 | 294 |
| Scientific Networking | | | | | 2,683 |
| CRT HPC Recharge | | | | | 1,327 |
| JGI Occupancy Labor Recharge (d) | | 948 | 1,152 | 1,188 | 980 |
| JGI Occupancy Material Recharge (d) | | 2,684 | - | 3,821 | 4,617 |
| Electricity | 12,576 | 10,795 | 10,597 | 12,075 | 12,919 |
| Mixed Waste Recharge/GL | 9 | 2 | 1 | | |
| National Center for Electron Microscopy | | 7 | 3 | | |
| GSRA - Material Recharge | 3,350 | 3,937 | 3,610 | 3,231 | 2,917 |
| GSRA - Non-Material Recharge | 1 | 0 | 7 | 19 | |
| Low Background Facility | 45 | 29 | 48 | | |
| Total Recharges | 37,824 | 40,722 | 37,437 | 43,477 | 49,735 |

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

⁽b) Does not include Procurement and Travel recharges.

⁽c) JGI Capillary Sequencing platform phased out in FY2012.

⁽d) JGI Administrative Charge phased out in FY2012 and replaced by JGI Occupancy Labor and Material Recharges.

5. FINANCIAL STATEMENT



Table 5.1

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

| | FY2015 (Note 2) | FY2014 (Note 3) |
|--------------------------------------|--------------------|--------------------|
| ASSETS: | | |
| Current Assets | | |
| Accounts Receivable | 33,558 | 32,342 |
| Inventories | 442 | 419 |
| Other Current Assets | 244 | 191 |
| Total Current Assets | 39,449 | 38,069 |
| Net Plant & Equipment | 622,978 | 674,003 |
| TOTAL ASSETS | 662,427 | 712,072 |
| LIABILITIES AND EQUITY: | | |
| Liabilities: | | |
| Current Liabilities | | |
| Drafts Payable | 1,764 | 2,167 |
| Accounts Payable | 40,145 | 38,366 |
| Accrued Expenses | 72,313 | 62,876 |
| Capital Lease Liability - Current | 6,869 | 6,572 |
| Unearned Revenues | 62,525 | 56,082 |
| Other | 357 | 395 |
| Total Current Liabilities | 183,973 | 166,458 |
| Environmental Liabilities | 699,944 | 686,085 |
| ES&H Liability | 345,436 | 300,674 |
| Capital Lease Liability - Noncurrent | 203 | 12,544 |
| Post-Retirement Benefits (Note 2) | 674,616 | 597,938 |
| Pension Plan Liability (Note 2) | 1,097,336 | 949,463 |
| TOTAL LIABILITIES | 3,001,508 | 2,713,162 |
| DOE EQUITY: | | |
| Beginning Equity | (2,001,090) | (1,531,802) |
| Change in Equity | (337,991) | (469,288) |
| Ending Equity | (2,339,081) | (2,001,090) |
| TOTAL LIABILITIES AND EQUITY | 662,427 | 712,072 |

Note 1

Note 1: Summary of Significant Accounting Policies

Basis of Presentation

These financial statements have been prepared to report the financial position and results of operations of Berkeley Lab. They have been prepared from the books and records of the Laboratory in accordance with Berkeley Lab'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 Berkeley Lab's accounts are integrated with those of DOE through the use of reciprocal accounts. All assets and liabilities are owned by the Federal Government.

Basis of Accounting

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

Financial Sources

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

Reimbursable work is performed for Federal and non-Federal entities. Costs are recorded and billed to the requesting entity by the Laboratory on behalf of DOE. 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 Berkeley Lab must be funded in advance.

Letter of Credit

The Laboratory received authority for expenditures according to a checks-paid letter of credit from the

U.S. Department of the Treasury; Letter of Credit Contract Number DE-AC02-05CH11231 with Wells Fargo Bank (WFB). The WFB letter of credit was renewed on November 1, 2012 for a five year term.

Cash

The Laboratory considers all balances in demand deposit accounts to be cash. At September 30, 2015, Funds Held for Other has \$5.2M in demand deposit accounts.

Inventories

The Laboratory uses a perpetual inventory system for certain inventory balances. An annual physical inventory is performed according to an inventory plan approved by DOE. Stores inventories and precious metals are valued and charged based on weighted of average costing method. Special materials are valued by DOE.

Property, Plant, and Equipment

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

Liabilities represent the amount of monies that are likely to be paid by the Laboratory as a result of transactions or events that have already occurred. Liabilities cannot be incurred by Berkeley Lab without an authorized appropriation, except for approved unfunded liabilities.

Accrued Vacation and Sick Leave

Laboratory policy provides for employees' annual vacation benefits ranging from 10 to 16 hours per month,



Note 1

Note 1: Summary of Significant Accounting Policies Continued

depending upon years of service. Vacation is earned and accrued on a monthly basis. Employees may accumulate vacation up to two times their annual leave. Unused earned vacation is paid 100% upon retirement or termination.

Each employee accumulates sick leave at a rate of eight hours per month. Unused sick leave accumulates until it is used. If an employee terminates before using sick leave, the benefit is forfeited without liability to the Laboratory. As such, no sick leave liability is recorded. Retiring employees are allowed to apply unused sick leave toward additional years of service.

Retirement Plan

Most career employees are participants in the UC Retirement System (UCRS). UCRS consists of a 2-tier basic defined benefit plan (UCRP) and two voluntary plans composed of several investment funds that are funded with employer and employee contributions. Employees who first become eligible to participate in UCRP on or after July 1, 2013 will accrue benefits in the 2013 Tier. An employee who began accruing benefits before July 1, 2013 will continue accruing benefits under the 1976 Tier until he or she has a break in service. If an employee returns to eligible employment on or after July 1, 2013 following a break in service, he or she will accrue additional service credit under the 2013 Tier.

Note 2

Note 2: Year-End Adjustments

DOE made adjustments to record FY2015 Post-Retirement Benefit and Pension Plan obligation. These amounts will be reflected In the Laboratory's actuals for October 2015. These adjustments are the result of coordination and approval by both DOE and UC.

The following is the adjusted balance sheet for FY2015:

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



Note 3

Note 3: Year-End Adjustments

In FY2015, due to chart of account realignment, we have reclassified certain items from Current Liabilities to Current Assets in the prior-period balance sheet to conform to the current period's presentation.

The following is the adjusted balance sheet for FY2014:

| Ad | Adjusted Balance Sheet (\$K) | | | | |
|-----------------------------------|------------------------------|-------------------------|-----------------|--|--|
| | FY2014 | Chart of Account | Adjusted FY2014 | | |
| | | Realignment adjustments | | | |
| ASSETS: | | , | | | |
| Current Assets | | | | | |
| Cash | - | 5,117 | 5,117 | | |
| Accounts Receivable | 7,250 | 25,092 | 32,342 | | |
| Inventories | 419 | - | 419 | | |
| Other Current Assets | 191 | - | 191 | | |
| Total Current Assets | 7,860 | 30,209 | 38,069 | | |
| Net Plant & Equipment | 674,003 | - | 674,003 | | |
| TOTAL ASSETS | 681,863 | 30,209 | 712,072 | | |
| LIABILITIES AND EQUITY | | | | | |
| Liabilities: | | | | | |
| Current Liabilities | | | | | |
| Drafts Payable | 1,837 | 330 | 2,167 | | |
| Accounts Payable | 43,132 | -4,766 | 38,366 | | |
| Accrued Expenses | 58,094 | 4,782 | 62,876 | | |
| Capital Lease Liability - Current | 6,572 | - | 6,572 | | |
| Unearned Revenues | 23,865 | 32,217 | 56,082 | | |
| Other | 2,749 | -2,354 | 395 | | |
| Total Current Liabilities | 136,249 | 30,209 | 166,458 | | |
| Environmental Liabilities | 686,085 | | 686,085 | | |
| ES&H Liability | 300,674 | | 300,674 | | |
| Capital Lease Liability | 12,544 | | 12,544 | | |
| Post-Retirement Benefits | 597,938 | | 597,938 | | |
| Pension Plan Liability | 949,463 | | 949,463 | | |
| Total Liabilities | 2,682,953 | 0 | 2,713,162 | | |
| Beginning Equity | (1,531,802) | | (1,531,802) | | |
| Change in Equity | (469,288) | | (469,288) | | |
| Ending Equity | (2,001,090) | | (2,001,090) | | |
| TOTAL LIABILITIES AND EQUITY | 681,863 | 0 | 712,072 | | |

6. PROCUREMENT & PROPERTY MANAGEMENT



Table 6.1

Purchases Placed Using Purchase Orders/Subcontracts

| Total POs | (\$K) | # Actions |
|------------------------|-----------|-----------|
| \$0 - \$25,000 | \$53,142 | 54,479 |
| \$25,001 - \$150,000 | \$76,921 | 1,286 |
| \$150,001- \$1,000,000 | \$92,449 | 270 |
| \$1,000,001 + | \$126,595 | 49 |
| Total | \$349,106 | |

Table 6.2

Procurement Purchase Order Dollar Amount by Division

| Division | PO (\$K) |
|--|-----------|
| NERSC | \$60,282 |
| Facilities | \$57,367 |
| Physical Biosciences | \$34,467 |
| Environmental Energy Technologies | \$29,027 |
| Genomics | \$23,994 |
| Physics | \$23,312 |
| Earth Sciences | \$20,377 |
| Materials Sciences | \$17,301 |
| Information Technology | \$14,869 |
| Scientific Networking | \$13,616 |
| Advanced Light Source | \$8,513 |
| Nuclear Sciences | \$7,789 |
| Life Sciences | \$6,645 |
| Accelerator & Fusion Research | \$5,516 |
| OCFO | \$4,827 |
| Environment, Health, Safety & Security | \$4,815 |
| Protective Services | \$3,471 |
| Engineering | \$3,273 |
| Chemical Sciences | \$3,212 |
| Computational Research | \$2,251 |
| Lab Directorate | \$2,066 |
| Human Resources | \$1,301 |
| Operations | \$435 |
| Public Affairs | \$382 |
| TOTAL | \$349,106 |

Figure 6.1

Procurement Spend by Channel (\$K)

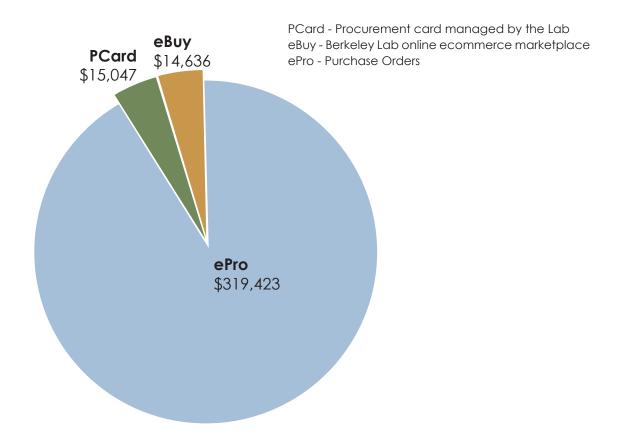
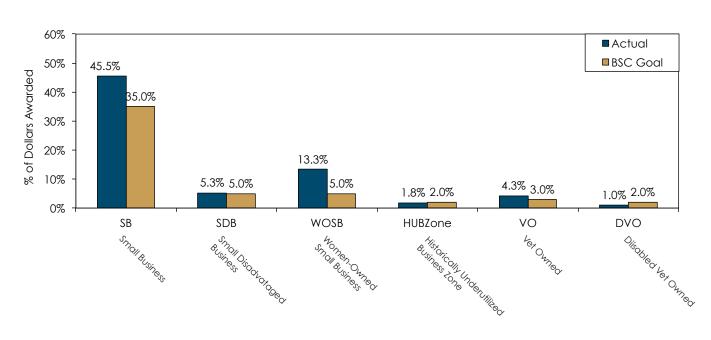


Figure 6.2

Laboratory Supplier Socioeconomic Performance



OCFO
Office of the Chief Financial Officer

Figure 6.3

Cycle Time for Purchase Orders ≤\$25k — Subcontracting Groups FY2015

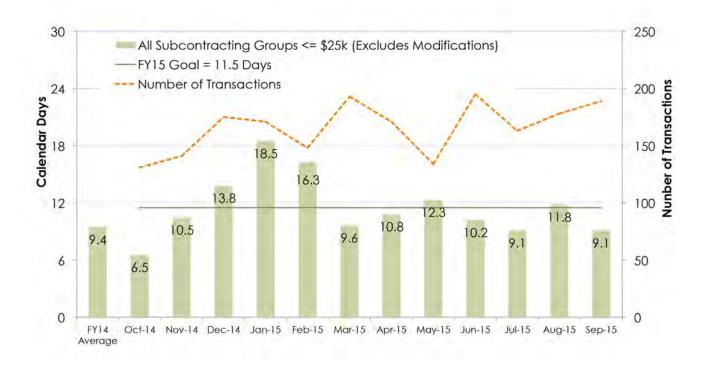


Figure 6.4

Procurement Cost Savings



Table 6.3

Property Management Activity

| | # of Assets | Acquisition Value (\$K) | |
|--|-------------|-------------------------|------------|
| Equipment (a) | 7,071 | 721,349 | |
| Attractive (b) | 18,944 | 69,920 | |
| High Risk (c) | 15 | 207,692 | |
| TOTAL ASSETS | 26,030 | 998,960 | |
| Computers Laptops | 6,331 | 11,965 | |
| Computer Desktops | 6,320 | 13,174 | |
| Tablets | 1,004 | 641 | |
| Total | 13,655 | 25,780 | |
| | | | |
| Inventory campaign | Base | Positive Resolutions | % Positive |
| Attractive | 2,075 | 2,055 | 99.04% |
| Controlled | 1,285 | 1,277 | 99.38% |
| High Risk | 13 | 13 | 100% |
| Final Results | 3,373 | 3,345 | 99.17% |
| Validation Size | 63 | 63 | 100% |
| Assets Scanned | 2,962 | 3,345 | 88.55% |
| Division | Asset Count | Acquisiton Value (\$K) | |
| Accelerator & Fusion Research | 1,012 | 92,256 | |
| Advanced Light Source | 1,518 | 224,401 | |
| Chief Financial Officer | 275 | 449 | |
| Chemical Sciences | 1,013 | 30,973 | |
| Computational Research (d) | 1,064 | 3,633 | |
| Environmental Energy Technologies | 2,088 | 25,570 | |
| Engineering | 874 | 13,394 | |
| Environment/Health/Safety | 294 | 2,389 | |
| Earth Sciences | 1,844 | 22,367 | |
| Excess | 49 | 1,186 | |
| Facilities | 611 | 6,133 | |
| Genomics | 1,397 | 27,694 | |
| Human Resources | 141 | 174 | |
| Information Technology | 2,582 | 19,325 | |
| Laboratory Directorate | 146 | 260 | |
| Life Sciences | 1,359 | 28,693 | |
| Material Sciences | 3,342 | 144,386 | |
| National Energy Research Scientific Computing Center (d) | 1,207 | 109,196 | |
| Nuclear Science | 775 | 65,247 | |
| Operations | 26 | 37 | |
| Public Affairs | 113 | 216 | |
| Physical Biosciences | 2,023 | 44,456 | |
| Physics | 851 | 101,612 | |
| Protective Services | 574 | 1,541 | |
| Scientific Networking (d) | 852 | 33,372 | |
| TOTAL ASSETS | 26,030 | 998,960 | |

- (a) Equipment Has an acquisition cost > \$10,000; Has an expected useful life of > 2 years.
- (b) Attractive Attractive regardless of cost (laptops, desktops, workstations, tablets and radios.
- (c) High Risk Property used in the nuclear fuel cycle, firearms, ammunition and explosives, nuclear weapon components or nuclear weapon-like components that do not contain nuclear material as listed in DOE O 474.2.
- (d) Computing Sciences broken into CR, SN, and NERSC in FY2015.

7. ACRONYMNS & KEY TERMS



Acronyms and Key Terms

G/L General Ledger

GSO Goods and Services on Order
GSRA Graduate Student Research Assistant

ALD Associate Lab Director ALS Advanced Light Source ANL Argonne National Laboratory ARPA-E Advanced Research Projects Agency-Energy ARRA American Recovery and Reinvestment Act of 2009 ASCR Advanced Scientific Computing Research A/S Assistant Secretary (DOE) B&R Budget and Reporting BA Budget Authority BES Basic Energy Sciences BSC Balanced Score Card CAD Computer Aided Design CAS Cost Accounting Standards CFO Chief Financial Officer CR Computational Research CRADA Cooperative Research and Development Agreement CSR Contractor-funded Institutionally Supported Research and Development DARHT Dual Axis Radiographic Hydrodynamic Test DNA Deoxyribonucleic Acid DOD Department of Defense DOE Department of Energy DOI Department of Interior eBuy Berkeley Lab's Online Marketplace EERE Energy Efficiency and Renewable Energy ERWM Environmental Restoration and Waste Management EHS Environment/Health/Safety ePro Berkeley Lab Purchase Orders ESnet Energy Sciences Network FTE Full-Time Equivalent FY Fiscal Year (Oct. 1 through Sept. 30) G&A General and Administrative GAAP Generally Accepted Accounting Principles

Acronyms and Key Terms Continued

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



Acronyms and Key Terms Continued

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

Key Terms

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

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