

**Science Crosscuts  
Facilities Maintenance and Repair**

The Department's Facilities Maintenance and Repair activities are tied to its programmatic missions, goals, and objectives. The Facilities Maintenance and Repair activities funded by the budget and displayed below and are intended to ensure that the scientific community has the facilities required to conduct cutting edge scientific research now and in the future to meet Department of Energy (DOE) goals and objectives.

**Costs for Direct-Funded Maintenance and Repair (including Deferred Maintenance Reduction)**

(dollars in thousands)

	<b>FY 2018 Planned Cost</b>	<b>FY 2018 Actual Cost</b>	<b>FY 2019 Planned Cost</b>	<b>FY 2020 Planned Cost</b>
Brookhaven National Laboratory	5,908	5,723	4,272	4,919
Lawrence Berkeley National Laboratory	6,999	7,000	12,950	15,750
Notre Dame Radiation Laboratory	175	160	125	124
Oak Ridge National Laboratory	15,298	17,904	15,260	14,534
Oak Ridge Office	6,324	3,899	4,223	4,568
Office of Scientific and Technical Information	412	346	381	381
SLAC National Accelerator Laboratory	4,878	3,029	4,761	3,023
Thomas Jefferson National Accelerator Facility	75	187	232	170
<b>Total, Direct-Funded Maintenance and Repair</b>	<b>40,069</b>	<b>38,248</b>	<b>42,204</b>	<b>43,469</b>

General purpose infrastructure includes multiprogram research laboratories, administrative and support buildings, as well as cafeterias, power plants, fire stations, utilities, roads, and other structures. Together, the Office of Science (SC) laboratories have over 1,400 operational buildings and real property trailers, with nearly 20 million gross square feet of space.

Generally, facilities maintenance and repair expenses are funded through an indirect overhead charge. In some cases, however, a laboratory may charge maintenance directly to a specific program. One example would be when maintenance is performed in a building used only by a single program. Such direct-funded charges are not directly budgeted.

**Costs for Indirect-Funded Maintenance and Repair (including Deferred Maintenance Reduction)**

(dollars in thousands)

	<b>FY 2018 Planned Cost</b>	<b>FY 2018 Actual Cost</b>	<b>FY 2019 Planned Cost</b>	<b>FY 2020 Planned Cost</b>
Ames Laboratory	2,900	2,150	2,600	2,400
Argonne National Laboratory	59,500	54,132	70,950	52,050
Brookhaven National Laboratory	45,918	30,262	37,146	38,578
Fermi National Accelerator Laboratory	19,238	16,818	20,801	19,936
Lawrence Berkeley National Laboratory	24,352	24,538	29,318	24,112
Lawrence Livermore National Laboratory	2,984	2,102	3,044	2,144
Los Alamos National Laboratory	635	641	648	926
Oak Ridge Institute for Science and Education	490	664	499	468
Oak Ridge National Laboratory and Y-12	64,202	67,565	79,260	70,179
Pacific Northwest National Laboratory	8,137	5,329	8,635	6,888
Princeton Plasma Physics Laboratory	8,200	4,834	6,577	5,250
Sandia National Laboratories	3,058	3,088	3,119	5,512
SLAC National Accelerator Laboratory	10,835	12,619	15,809	8,919
Thomas Jefferson National Accelerator Facility	6,550	8,202	5,374	8,600
<b>Total, Indirect-Funded Maintenance and Repair</b>	<b>256,999</b>	<b>232,944</b>	<b>283,780</b>	<b>245,962</b>

Facilities maintenance and repair activities funded indirectly through overhead charges at SC laboratories are displayed. Since this funding is allocated to all work done at each laboratory, the cost of these activities charged to funding from SC and other DOE organizations, as well as other Federal agencies and other entities doing work at SC laboratories. Maintenance reported to SC for non-SC laboratories is also shown. The figures are total projected expenditures across all SC laboratories.

### Report on FY 2018 Expenditures for Maintenance and Repair

This report responds to the requirements established in Conference Report (H.Rep. 108-10) accompanying Public Law 108-7 (pages 886–887), which requires the Department of Energy to provide an annual year-end report on maintenance expenditures to the Committees on Appropriations. This report compares the actual maintenance expenditures in FY 2018 to the amount planned for FY 2018, including Congressionally directed changes.

#### Science Total Costs for Maintenance and Repair

(dollars in thousands)

	FY 2018 Planned Costs	FY 2018 Actual Costs
Ames Laboratory	2,900	2,150
Argonne National Laboratory	59,500	54,132
Brookhaven National Laboratory	51,826	35,985
Fermi National Accelerator Laboratory	19,238	16,818
Lawrence Berkeley National Laboratory	31,351	31,538
Lawrence Livermore National Laboratory	2,984	2,102
Los Alamos National Laboratory	635	641
Notre Dame Radiation Laboratory	175	160
Oak Ridge Institute for Science and Education	490	664
Oak Ridge National Laboratory and Y-12	79,500	85,469
Oak Ridge Office	6,324	3,899
Office of Scientific and Technical Information	412	346
Pacific Northwest National Laboratory	8,137	5,329
Princeton Plasma Physics Laboratory	8,200	4,834
Sandia National Laboratories	3,058	3,088
SLAC National Accelerator Laboratory	15,713	15,648
Thomas Jefferson National Accelerator Facility	6,625	8,389
<b>Total, Maintenance and Repair</b>	<b>297,068</b>	<b>271,192</b>

**Science**  
**Excess Facilities**

Excess Facilities are facilities no longer required to support the Department’s needs, present or future missions or functions, or the discharge of its responsibilities. The table below reports the funding to deactivate and dispose of excess infrastructure, including stabilization and risk reduction activities at high-risk excess facilities. These activities result in surveillance and maintenance cost avoidance and reduced risk to workers, the public, the environment, and programs. This includes reductions in costs related to maintenance of excess facilities (including high-risk excess facilities) necessary to minimize the risk posed by those facilities prior to disposition. Science has no reported direct funded excess facilities costs.

**Costs for Indirect-Funded Excess Facilities**

(dollars in thousands)

	<b>FY 2018 Planned Cost</b>	<b>FY 2018 Actual Cost</b>	<b>FY 2019 Planned Cost</b>	<b>FY 2020 Planned Cost</b>
Argonne National Laboratory	6,700	58	6,750	92
Brookhaven National Laboratory	40	1,161	893	875
Fermi National Accelerator Laboratory	150	207	243	150
Lawrence Berkeley National Laboratory	—	25	66	48
Oak Ridge National Laboratory	1,000	2,289	1,000	1,000
SLAC National Accelerator Laboratory	—	—	50	—
<b>Total, Indirect-Funded Excess Facilities</b>	<b>7,890</b>	<b>3,740</b>	<b>9,002</b>	<b>2,165</b>

**Science  
Research and Development**

(dollars in thousands)

	<b>FY 2018 Enacted</b>	<b>FY 2019 Enacted</b>	<b>FY 2020 Request</b>	<b>FY 2020 Request vs FY 2019 Enacted</b>
Basic	4,842,854	4,978,915	4,471,870	-507,045
Applied	—	—	—	—
<b>Subtotal, R&amp;D</b>	<b>4,842,854</b>	<b>4,978,915</b>	<b>4,471,870</b>	<b>-507,045</b>
Equipment	197,355	277,069	182,408	-94,661
Construction	1,160,494	1,261,065	821,194	-439,871
<b>Total, R&amp;D</b>	<b>6,200,703</b>	<b>6,517,049</b>	<b>5,475,472</b>	<b>-1,041,577</b>

**Science**  
**Small Business Innovative Research/Small Business Technology Transfer (SBIR/STTR)**

(dollars in thousands)

	<b>FY 2018 Enacted</b>	<b>FY 2019 Enacted</b>	<b>FY 2020 Request</b>	<b>FY 2020 Request vs FY 2019 Enacted</b>
Office of Science				
Advanced Scientific Computing Research				
SBIR	19,040	22,329	23,269	+940
STTR	2,678	3,140	3,272	+132
Basic Energy Sciences				
SBIR	53,652	52,617	51,393	-1,224
STTR	7,545	7,400	7,227	-173
Biological and Environmental Research				
SBIR	21,393	21,702	15,679	-6,023
STTR	3,007	3,052	2,204	-848
Fusion Energy Sciences				
SBIR	11,598	12,992	8,899	-4,093
STTR	1,631	1,827	1,252	-575
High Energy Physics				
SBIR	21,377	21,124	17,171	-3,953
STTR	3,006	2,971	2,415	-556
Nuclear Physics				
SBIR	16,875	17,500	16,336	-1,164
STTR	2,373	2,461	2,297	-164
<b>Total, Office of Science SBIR</b>	<b>143,935</b>	<b>148,264</b>	<b>132,747</b>	<b>-15,517</b>
<b>Total, Office of Science STTR</b>	<b>20,240</b>	<b>20,851</b>	<b>18,667</b>	<b>-2,184</b>
Other DOE <sup>a</sup>	TBD	TBD	TBD	TBD
<b>Total, DOE SBIR</b>	<b>143,935</b>	<b>148,264</b>	<b>132,747</b>	<b>-15,517</b>
<b>Total, DOE STTR</b>	<b>20,240</b>	<b>20,851</b>	<b>18,667</b>	<b>-2,184</b>

<sup>a</sup> The other DOE programs SBIR/STTR funding amounts are listed in the other DOE budget volumes.

**Science**  
**Safeguards and Security Crosscut**

(dollars in thousands)

	<b>FY 2018 Enacted</b>	<b>FY 2019 Enacted</b>	<b>FY 2020 Request</b>	<b>FY 2020 Request vs FY 2019 Enacted</b>
Protective Forces	43,545	43,545	43,545	—
Security Systems	10,097	10,370	14,883	+4,513
Information Security	4,356	4,356	4,356	—
Cyber Security	30,619	33,346	33,346	—
Personnel Security	5,334	5,444	5,444	—
Material Control and Accountability	2,431	2,431	2,431	—
Program Management	6,618	6,618	6,618	—
<b>Total, Safeguards and Security</b>	<b>103,000</b>	<b>106,110</b>	<b>110,623</b>	<b>+4,513</b>