Science
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)

	FY 2019 Planned Cost	FY 2019 Actual Cost	FY 2020 Planned Cost	FY 2021 Planned Cost
Brookhaven National Laboratory	4,870	5,991	4,821	4,917
Lawrence Berkeley National Laboratory	8,532	4,273	8,612	3,900
Notre Dame Radiation Laboratory	130	185	124	125
Oak Ridge National Laboratory	18,441	26,435	18,994	19,564
Oak Ridge Office	4,492	4,007	6,479	6,673
Office of Scientific and Technical Information	364	343	382	421
SLAC National Accelerator Laboratory	3,150	3,497	3,276	3,407
Thomas Jefferson National Accelerator Facility	191	122	195	198
Total, Direct-Funded Maintenance and Repair	**40,170**	**44,853**	**42,883**	**39,205**

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.

Indirect-Funded Maintenance and Repair (including Deferred Maintenance Reduction)

Facilities maintenance and repair activities funded indirectly through overhead charges at SC laboratories are displayed in the table above. Since this funding is allocated to all work done at each laboratory, the cost of these activities is 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 costs across all SC laboratories.

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

(dollars in thousands)

	FY 2019 Planned Cost	FY 2019 Actual Cost	FY 2020 Planned Cost	FY 2021 Planned Cost
Ames Laboratory	2,300	1,962	2,700	2,400
Argonne National Laboratory	44,900	42,699	45,823	46,768
Brookhaven National Laboratory	31,747	33,858	29,619	30,211
Fermi National Accelerator Laboratory	20,759	15,829	20,994	21,704
Lawrence Berkeley National Laboratory	27,683	24,923	28,778	29,749
Notre Dame Radiation Laboratory	—	53	—	—
Oak Ridge Institute for Science and Education	387	598	468	480
Oak Ridge National Laboratory and Y-12	69,592	55,928	71,680	73,830
Oak Ridge Office	1,511	1,498	1,492	1,537
Pacific Northwest National Laboratory	8,622	7,499	10,591	10,322
Princeton Plasma Physics Laboratory	6,450	6,856	6,644	6,843
SLAC National Accelerator Laboratory	13,124	12,525	13,649	14,195
Thomas Jefferson National Accelerator Facility	8,366	6,986	9,988	10,188
Total, Indirect-Funded Maintenance and Repair	**235,441**	**211,214**	**242,426**	**248,227**

Report on FY 2019 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 DOE to provide an annual year-end report on maintenance expenditures to the Committees on Appropriations. This report compares the actual maintenance expenditures in FY 2019 to the amount planned for FY 2019, including Congressionally directed changes.

Science
Total Costs for Maintenance and Repair

(dollars in thousands)

	FY 2019 Planned Costs	FY 2019 Actual Costs
Ames Laboratory	2,300	1,962
Argonne National Laboratory	44,900	42,699
Brookhaven National Laboratory	36,617	39,849
Fermi National Accelerator Laboratory	20,759	15,829
Lawrence Berkeley National Laboratory	36,215	29,196
Notre Dame Radiation Laboratory	130	238
Oak Ridge Institute for Science and Education	387	598
Oak Ridge National Laboratory and Y-12	88,033	82,363
Oak Ridge Office	6,003	5,505
Office of Scientific and Technical Information	364	343
Pacific Northwest National Laboratory	8,622	7,499
Princeton Plasma Physics Laboratory	6,450	6,856
SLAC National Accelerator Laboratory	16,274	16,022
Thomas Jefferson National Accelerator Facility	8,557	7,108
Total, Maintenance and Repair	**275,611**	**256,067**

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. SC has no direct funded excess facilities costs to report.

Costs for Indirect-Funded Excess Facilities

(dollars in thousands)

	FY 2019 Planned Cost	FY 2019 Actual Cost	FY 2020 Planned Cost	FY 2021 Planned Cost
Argonne National Laboratory	400[a]	400	400	400
Brookhaven National Laboratory	893	965	958	978
Fermi National Accelerator Laboratory	243	20	20	20
Lawrence Berkeley National Laboratory	66	47	16	16
Oak Ridge National Laboratory	1,000	500	500	500
SLAC National Accelerator Laboratory	50	52	54	56
Total, Indirect-Funded Excess Facilities	**2,652**	**1,984**	**1,948**	**1,970**

[a] This figure was reported erroneously as 6,750 in the FY 2020 Congressional Budget Justification.

Science
Research and Development

(dollars in thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request	FY 2021 Request vs FY 2020 Enacted
Basic	4,964,670	5,324,920	4,734,211	-590,709
Applied	—	—	—	—
Subtotal, R&D	4,964,670	5,324,920	4,734,211	-590,709
Equipment	277,069	217,526	198,332	-19,194
Construction	1,275,310	1,380,554	827,763	-552,791
Total, R&D	**6,517,049**	**6,923,000**	**5,760,306**	**-1,162,694**

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

(dollars in thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request	FY 2021 Request vs FY 2020 Enacted
Office of Science				
Advanced Scientific Computing Research				
SBIR	22,329	25,160	26,051	+891
STTR	3,140	3,538	3,664	+126
Basic Energy Sciences				
SBIR	52,617	57,423	53,080	-4,343
STTR	7,400	8,075	7,464	-611
Biological and Environmental Research				
SBIR	21,702	23,687	16,318	-7,369
STTR	3,052	3,330	2,295	-1,035
Fusion Energy Sciences				
SBIR	12,992	12,348	8,469	-3,879
STTR	1,827	1,737	1,191	-546
High Energy Physics				
SBIR	21,124	22,265	18,763	-3,502
STTR	2,971	3,131	2,558	-573
Nuclear Physics				
SBIR	17,500	18,257	17,220	-1,037
STTR	2,461	2,468	2,218	-250
Total, Office of Science SBIR[a]	**148,264**	**159,140**	**139,901**	**-19,239**
Total, Office of Science STTR	**20,851**	**22,279**	**19,390**	**-2,889**

[a] The other DOE programs SBIR/STTR funding amounts are listed in the other DOE budget volumes.

Science
Safeguards and Security Crosscut

(dollars in thousands)

	FY 2019 Enacted	FY 2020 Enacted	FY 2021 Request	FY 2021 Request vs FY 2020 Enacted
Protective Forces	43,545	43,545	43,545	—
Security Systems	10,370	16,960	19,883	+2,923
Information Security	4,356	4,356	4,356	—
Cyber Security	33,346	33,346	33,346	—
Personnel Security	5,444	5,444	5,444	—
Material Control and Accountability	2,431	2,431	2,431	—
Program Management	6,618	6,618	6,618	—
Total, Safeguards and Security	**106,110**	**112,700**	**115,623**	**+2,923**