

**Science**  
**Funding by Congressional Control**

(dollars in thousands)

	FY 2018 Enacted	FY 2019 Enacted	FY 2020 Request	FY 2020 Request vs FY 2019 Enacted
<b>Advanced Scientific Computing Research</b>				
Research	605,000	702,794	732,153	+29,359
17-SC-20, Office of Science Exascale Computing Project (SC-ECP)	205,000	232,706	188,735	-43,971
<b>Total, Advanced Scientific Computing Research</b>	<b>810,000</b>	<b>935,500</b>	<b>920,888</b>	<b>-14,612</b>
<b>Basic Energy Sciences</b>				
Research	1,744,900	1,757,700	1,675,285	-82,415
<b>Construction</b>				
19-SC-14, Second Target Station (STS), ORNL	—	1,000	1,000	—
18-SC-10, Advanced Photon Source Upgrade (APS-U), ANL	93,000	130,000	150,000	+20,000
18-SC-11, Spallation Neutron Source Proton Power Upgrade (PPU), ORNL	36,000	60,000	5,000	-55,000
18-SC-12, Advanced Light Source Upgrade (ALS-U), LBNL (19-SC-10)	16,000	60,000	13,000	-47,000
18-SC-13, Linac Coherent Light Source-II-High Energy (LCLS-II-HE), SLAC (19-SC-11)	8,000	28,000	14,000	-14,000
13-SC-10, Linac Coherent Light Source-II (LCLS-II), SLAC	192,100	129,300	—	-129,300
<b>Total, Construction</b>	<b>345,100</b>	<b>408,300</b>	<b>183,000</b>	<b>-225,300</b>
<b>Total, Basic Energy Sciences</b>	<b>2,090,000</b>	<b>2,166,000</b>	<b>1,858,285</b>	<b>-307,715</b>
<b>Biological and Environmental Research</b>	<b>673,000</b>	<b>705,000</b>	<b>494,434</b>	<b>-210,566</b>
<b>Fusion Energy Sciences</b>				
Research	410,111	432,000	294,750	-137,250
<b>Construction</b>				
20-SC-61, Matter in Extreme Conditions (MEC) Petawatt Upgrade	—	—	1,000	+1,000
14-SC-60, U.S. Contributions to ITER	122,000	132,000	107,000	-25,000
<b>Total, Construction</b>	<b>122,000</b>	<b>132,000</b>	<b>108,000</b>	<b>-24,000</b>
<b>Total, Fusion Energy Sciences</b>	<b>532,111</b>	<b>564,000</b>	<b>402,750</b>	<b>-161,250</b>

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<b>High Energy Physics</b>				
Research	767,600	800,000	648,038	-151,962
<b>Construction</b>				
18-SC-42, Proton Improvement Plan II (PIP-II), FNAL	1,000	20,000	20,000	—
11-SC-40, Long Baseline Neutrino Facility/Deep Underground Neutrino Experiment (LBNF/DUNE), FNAL	95,000	130,000	100,000	-30,000
11-SC-41, Muon to Electron Conversion Experiment, FNAL	44,400	30,000	—	-30,000
<b>Total, Construction</b>	<b>140,400</b>	<b>180,000</b>	<b>120,000</b>	<b>-60,000</b>
<b>Total, High Energy Physics</b>	<b>908,000</b>	<b>980,000</b>	<b>768,038</b>	<b>-211,962</b>
<b>Nuclear Physics</b>				
Operation and Maintenance	586,800	615,000	579,854	-35,146
<b>Construction</b>				
20-SC-51, U.S. Stable Isotope Production and Research Center, ORNL	—	—	5,000	+5,000
14-SC-50, Facility for Rare Isotope Beams, MSU	97,200	75,000	40,000	-35,000
<b>Total, Construction</b>	<b>97,200</b>	<b>75,000</b>	<b>45,000</b>	<b>-30,000</b>
<b>Total, Nuclear Physics</b>	<b>684,000</b>	<b>690,000</b>	<b>624,854</b>	<b>-65,146</b>
<b>Workforce Development for Teachers and Scientists</b>	<b>19,500</b>	<b>22,500</b>	<b>19,500</b>	<b>-3,000</b>
<b>Science Laboratories Infrastructure</b>				
Infrastructure Support				
Payment in Lieu of Taxes	1,713	1,713	4,540	+2,827
Oak Ridge Landlord	6,382	6,434	5,610	-824
Facilities and Infrastructure	70,347	45,543	25,050	-20,493
Oak Ridge Nuclear Operations	26,000	26,000	10,000	-16,000
<b>Total, Infrastructure Support</b>	<b>104,442</b>	<b>79,690</b>	<b>45,200</b>	<b>-35,490</b>
<b>Construction</b>				
20-SC-71, Critical Utilities Rehabilitation Project, BNL	—	—	12,000	+12,000
20-SC-72, Seismic and Safety Modernization, LBNL	—	—	5,000	+5,000
20-SC-75, CEBAF Renovation and Expansion, TJNAF (19-SC-75)	—	—	2,000	+2,000
20-SC-76, Craft Resources Support Facility, ORNL (19-SC-76)	—	—	20,000	+20,000
20-SC-77, Large Scale Collaboration Center, SLAC (19-SC-77)	—	—	3,000	+3,000
19-SC-71, Science User Support Center, BNL	—	7,000	6,400	-600
19-SC-72, Electrical Capacity and Distribution Capability, ANL	—	30,000	30,000	—

(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>
19-SC-73, Translational Research Capacity, ORNL	—	25,000	15,000	-10,000
19-SC-74, BioEPIC, LBNL	—	5,000	6,000	+1,000
18-SC-71, Energy Sciences Capability, PNNL	20,000	24,000	9,000	-15,000
17-SC-71, Integrated Engineering Research Center, FNAL	20,000	20,000	10,000	-10,000
17-SC-73, Core Facility Revitalization, BNL	30,000	42,200	—	-42,200
15-SC-76, Materials Design Laboratory, ANL	44,500	—	—	—
15-SC-78, Integrative Genomics Building, LBNL	38,350	—	—	—
<b>Total, Construction</b>	<b>152,850</b>	<b>153,200</b>	<b>118,400</b>	<b>-34,800</b>
<b>Total, Science Laboratories Infrastructure</b>	<b>257,292</b>	<b>232,890</b>	<b>163,600</b>	<b>-69,290</b>
<b>Safeguards and Security</b>	<b>103,000</b>	<b>106,110</b>	<b>110,623</b>	<b>+4,513</b>
<b>Program Direction</b>	<b>183,000</b>	<b>183,000</b>	<b>183,000</b>	<b>—</b>
<b>Total, Science</b>	<b>6,259,903</b>	<b>6,585,000</b>	<b>5,545,972</b>	<b>-1,039,028</b>
<b>Federal FTEs</b>	<b>825</b>	<b>810</b>	<b>797</b>	<b>-13</b>

**SBIR/STTR funding:**

- FY 2018 Enacted: SBIR \$143,935,000 and STTR \$20,240,000 (SC only)
- FY 2019 Enacted: SBIR \$148,264,000 and STTR \$20,851,000 (SC only)
- FY 2020 Request: SBIR \$132,747,000 and STTR \$18,667,000 (SC only)