NATIONAL SCIENCE FOUNDATION RESEARCH INFRASTRUCTURE SUMMARY FY 2020 BUDGET REQUEST TO CONGRESS

(Dollars in Millions)

		FY 2019 (TBD)	FY 2020 Request	FY 2020 Request change over FY 2018 Actual	
	FY 2018 Actual				
				Amount	Percent
Operations and Maintenance of Major Facilities ¹	\$1,039.77	-	\$861.94	-\$177.83	-17.1%
Major Research Facilities Construction Investments	\$228.47	-	\$181.63	-\$46.84	-20.5%
Construction, Acquisition, and Commissioning (MREFC) ²	185.73	-	177.23	-8.50	-4.6%
Design Stage Activities ³	42.74	-	4.40	-38.34	-89.7%
Mid-scale Research Infrastructure ⁴	\$57.11	-	\$111.87	\$54.76	95.9%
MREFC Mid-scale Research Infrastructure	-	-	45.00	45.00	N/A
NSF-wide Mid-scale Research Infrastructure (R&RA)	-	-	30.00	30.00	N/A
Directorate Midscale Research Infrastructure Programs	57.11	-	36.87	-20.24	-35.4%
Major Research Instrumentation (MRI)	\$100.44	-	\$65.00	-\$35.44	-35.3%
Polar Logistical and Infrastructure Support ⁵	\$124.23	-	\$120.61	-\$3.62	-2.9%
CISE Networking and Computational Resources Infrastructure	\$118.39	-	\$113.50	-\$4.89	-4.1%
and Services (NCRIS) ⁶					
Research Resources ⁷	\$186.47	-	\$157.88	-\$28.59	-15.3%
BIO	58.78	-	54.15	-4.63	-7.9%
CISE	36.27	-	36.00	-0.27	-0.7%
GEO	57.99	-	47.30	-10.69	-18.4%
MPS	15.65	-	8.02	-7.63	-48.8%
SBE	11.48	-	8.18	-3.30	-28.8%
OPP	6.29	-	4.23	-2.06	-32.7%
Other Research Infrastructure	\$76.32	-	\$75.45	-\$0.87	-1.1%
Subtotal, Research Infrastructure Support	\$1,931.19	-	\$1,687.88	-\$243.31	-12.6%
Research Infrastructure Stewardship Offset	-1.29	-	-1.67	-0.38	29.7%
RESEARCH INFRASTRUCTURE TOTAL	\$1,929.91	-	\$1,686.21	-\$243.70	-12.6%

¹ For facility level detail on operations and maintenance, see the Major Multi-User Research Facilities table in the Facilities chapter.

² Construction, Acquisition, and Commissioning are for implementation support provided through the MREFC account. MREFC funding is included for DKIST (\$20.0 million in FY 2018); for RCRV (\$88.0 million in FY 2018); and LSST (\$57.80 million in FY 2018 and \$46.34 million in FY 2020); in FY 2020 for: Antarctic Infrastructure Modernization for Science (AIMS) (\$97.89 million), High-Lumosity Large Hadron Collider Upgrade (HL-LHC) (\$33.0 million), and Mid-scale Research Infrastructure (\$45.0 million, shown on the MREFC Mid-scale RI line below).

³ Design Stage Activities include support for potential next generation multi-user facilities funded through R&RA. This line reflects funding for AIMS in FY 2018 (\$16.14 million); for a potential HL-LHC in FY 2018 (\$16.60 million, of which \$7.50 million funds FY 2019 and FY 2020 activities); for LIGO A+ (\$10.0 million in FY 2018 and \$400,000 in FY 2020); and for the potential Leadership Class Computing Facility in FY 2020 (\$4.0 million).

⁴ NSF-wide Mid-scale Research Infrastructure is provided through both the Research and Related Activities account (if the total project cost is less than \$20.0 million) and the Major Research Equipment and Facilities account (if the total project cost is greater than \$20.0 million). For more information, please refer to the Mid-scale Research Infrastructure narrative in the NSF-wide Investments chapter.

⁵ Polar Logistical and Infrastructure Support includes funding for Arctic Logistics; U.S. Antarctic Logistical Support Activities (USALS); and Polar Environment, Health, and Safety (PEHS).

⁶ Funding for Networking and Computational Resources Infrastructure excludes support for the potential Leadership Class Computing Facility in FY 2020 (\$4.0 million), which is captured under Design Stage Activities above.

⁷ Funding for Research Resources includes support for the operation and maintenance of minor facilities, infrastructure and instrumentation, field stations, museum collections, etc.

Summary Tables