## NATIONAL SCIENCE FOUNDATION RESEARCH INFRASTRUCTURE SUMMARY FY 2021 BUDGET REQUEST TO CONGRESS

(Dollars in Millions)

	FY 2019 Actual	FY 2020 (TBD)	FY 2021 Request	FY 2021 Request change over FY 2019 Actual	
				Amount	Percent
Operations and Maintenance of Major Facilities <sup>1</sup>	\$1,024.38	-	\$867.42	-\$156.96	-15.3%
Major Research Facilities Construction Investments	\$286.95	-	\$163.75	-\$123.20	-42.9%
Construction, Acquisition, and Commissioning (MREFC) <sup>2</sup>	284.95	-	163.75	-121.20	-42.5%
Design Stage Activities <sup>3</sup>	2.00	-	-	-2.00	-100.0%
Mid-scale Research Infrastructure <sup>4</sup>	\$94.46	-	\$116.73	\$22.27	23.6%
MREFC Mid-scale Research Infrastructure <sup>2</sup>	-	-	65.00	65.00	N/A
NSF-wide Mid-scale Research Infrastructure (R&RA)	60.04	-	32.67	-27.37	-45.6%
Directorate Midscale Research Infrastructure Programs	34.43	-	19.06	-15.37	-44.6%
Major Research Instrumentation (MRI)	\$75.11	-	\$61.70	-\$13.41	-17.9%
Polar Logistical and Infrastructure Support <sup>5</sup>	\$138.57	-	\$118.36	-\$20.21	-14.6%
CISE Networking and Computational Resources	\$124.91	-	\$111.04	-\$13.87	-11.1%
Infrastructure and Services (NCRIS) <sup>6</sup>					
Research Resources <sup>7</sup>	\$210.89	-	\$173.10	-\$37.79	-17.9%
BIO	63.98	-	58.76	-5.22	-8.2%
CISE	44.71	-	39.00	-5.71	-12.8%
GEO	63.11	-	48.22	-14.89	-23.6%
MPS	22.32	=	15.10	-7.22	-32.4%
SBE	8.82	=	7.98	-0.84	-9.5%
OPP	7.95	-	4.04	-3.91	-49.2%
Other Research Infrastructure	\$83.53	-	\$83.60	\$0.07	0.1%
Subtotal, Research Infrastructure Support	\$2,038.81	-	\$1,695.70	-\$343.11	-16.8%
Research Infrastructure Stewardship Offset	-1.74	-	-1.32	0.42	-24.1%
RESEARCH INFRASTRUCTURE TOTAL	\$2,037.07	-	\$1,694.38	-\$342.69	-16.8%

<sup>&</sup>lt;sup>1</sup> For facility level detail on operations and maintenance, see the Major Multi-User Research Facilities table in the Facilities chapter.

<sup>&</sup>lt;sup>2</sup> Construction, Acquisition, and Commissioning are for implementation support provided through the MREFC account. MREFC funding is included for Daniel K. Inouye Solar Telescope (DKIST, \$19.59 million); Regional Class Research Vessels (RCRV, \$108.12 million); and National Ecological Observatory Network (NEON, \$70,000) in FY 2019; and Antarctic Infrastructure Modernization for Science (AIMS, \$103.70 million in FY 2019 and \$90.0 million in FY 2021); Vera C. Rubin Observatory (\$53.48 million in FY 2019 and \$40.75 million in FY 2021); the High Luminosity-Large Hadron Collider Upgrade (HL-LHC) (\$33.0 million in FY 2021), and Mid-scale Research Infrastructure (\$65.0 million in FY 2021, shown on the MREFC Mid-scale RI line below).

<sup>&</sup>lt;sup>3</sup> Design Stage Activities include support for potential next generation multi-user facilities funded through R&RA. This line reflects FY 2019 funding of \$2.0 million for the potential Leadership Class Computing Facility.

<sup>&</sup>lt;sup>4</sup> NSF-wide Mid-scale Research Infrastructure is provided through both the R&RA account (if the total project cost is less than \$20.0 million) and the MREFC 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.

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

<sup>&</sup>lt;sup>6</sup> Funding for Networking and Computational Resources Infrastructure and Services excludes support for the potential Leadership Class Computing Facility in FY 2019 (\$2.0 million), which is captured under Design Stage Activities above.

<sup>&</sup>lt;sup>7</sup> Funding for Research Resources includes support for the operation and maintenance of minor facilities, infrastructure and instrumentation, field stations, museum collections, etc.

Summary Tables