

Summary Tables

**National Science Foundation  
Research Infrastructure Summary  
FY 2017 Budget Request to Congress**

(Dollars in Millions)

	FY 2015	FY 2016	FY 2017	FY 2017	FY 2017	FY 2017 Request change over	
	Actual	Estimate	Request (Discretionary)	Request (Mandatory) <sup>1</sup>	Request	FY 2016 Estimate	Percent
<b>Facilities</b>	<b>\$894.64</b>	<b>\$977.10</b>	<b>\$1,007.60</b>	<b>\$15.10</b>	<b>\$1,022.70</b>	<b>\$45.60</b>	<b>4.7%</b>
Academic Research Fleet <sup>2</sup>	79.87	83.80	82.80	-	82.80	-1.00	-1.2%
Arecibo Observatory	8.01	8.20	8.30	-	8.30	0.10	1.2%
AST Portfolio Review Implementation	0.16	7.00	7.00	-	7.00	-	-
Cornell High Energy Synchrotron Source (CHESS) <sup>3</sup>	21.97	18.03	20.00	-	20.00	1.97	10.9%
Gemini Observatory	20.61	19.88	20.42	-	20.42	0.54	2.7%
Geodesy Advancing Geosciences and EarthScope (GAGE)	11.58	11.58	11.58	1.50	13.08	1.50	13.0%
IceCube Neutrino Observatory (IceCube)	6.90	6.90	7.00	-	7.00	0.10	1.4%
International Ocean Discovery Program (IODP)	48.00	48.00	48.00	-	48.00	-	-
Large Hadron Collider (LHC)	18.00	18.00	18.00	-	18.00	-	-
Laser-Interferometer Gravitational-wave Observatory (LIGO)	33.00	39.43	39.43	-	39.43	-	-
National High Magnetic Field Laboratory (NHMFL) <sup>4</sup>	35.92	22.78	35.78	-	35.78	13.00	57.1%
National Nanotechnology Coordinated Infrastructure (NNCI)	15.02	15.46	15.46	-	15.46	-	-
National Superconducting Cyclotron Laboratory (NSCL) (MSU Cyclotron)	23.00	24.00	24.50	-	24.50	0.50	2.1%
Natural Hazards Engineering Research Infrastructure (NHERI)	18.24	12.50	12.50	-	12.50	-	-
Ocean Observatories Initiative (OOI)	55.00	55.00	50.00	-	50.00	-5.00	-9.1%
Other Facilities <sup>5</sup>	2.77	2.77	2.79	-	2.79	0.02	0.7%
Polar Facilities and Logistics	314.54	286.57	296.07	11.00	307.07	20.50	7.2%
Seismological Facilities for Advancement of Geoscience & EarthScope (SAGE)	24.35	24.35	24.35	2.60	26.95	2.60	10.7%
<b>Other Facilities Investments</b>							
Major Research Equipment and Facilities Construction <sup>6</sup>	154.01	258.35	276.12	-	276.12	17.77	6.9%
Facilities Pre-Construction Planning <sup>7</sup>	3.70	14.50	7.50	-	7.50	-7.00	-48.3%
<b>Federally Funded R&amp;D Centers</b>	<b>\$220.25</b>	<b>\$217.62</b>	<b>\$219.02</b>	<b>\$1.30</b>	<b>\$220.32</b>	<b>\$2.70</b>	<b>1.2%</b>
National Center for Atmospheric Research (NCAR)	98.70	99.70	99.70	1.30	101.00	1.30	1.3%
National Optical Astronomy Observatories (NOAO)	25.50	21.60	21.83	-	21.83	0.23	1.1%
National Radio Astronomy Observatories (NRAO) <sup>8</sup>	83.31	82.08	75.25	-	75.25	-6.83	-8.3%
Other Astronomical Facilities	-	-	11.50	-	11.50	11.50	N/A
National Solar Observatory (NSO) <sup>9</sup>	8.00	9.50	6.00	-	6.00	-3.50	-36.8%
Science & Technology Policy Institute (STPI)	4.74	4.74	4.74	-	4.74	-	-
<b>Other Research Instrumentation and Infrastructure</b>	<b>\$503.53</b>	<b>\$525.78</b>	<b>\$533.75</b>	<b>\$9.80</b>	<b>\$543.55</b>	<b>\$17.77</b>	<b>3.4%</b>
Major Research Instrumentation (MRI)	74.22	75.69	90.00	-	90.00	14.31	18.9%
Midscale Research Infrastructure	-	48.02	52.98	-	52.98	4.96	10.3%
National Center for Science & Engineering Statistics (NCSES)	45.37	45.21	46.13	-	46.13	0.92	2.0%
NCSES Science of Science and Innovation Policy (SciSIP)	4.95	4.95	4.95	-	4.95	-	-
Activities	-	-	-	-	-	-	-
Networking and Computational Resources Infrastructure and Services	116.45	123.80	123.80	-	123.80	-	-
Polar Environment, Health, and Safety (PEHS)	6.66	6.62	6.62	0.50	7.12	0.50	7.6%
Research Resources <sup>10</sup>	255.05	219.74	207.52	9.30	216.82	-2.92	-1.3%
Research Resources – Public Access Initiative	0.82	1.75	1.75	-	1.75	-	-
<b>Subtotal, Research Infrastructure Support</b>	<b>\$1,618.42</b>	<b>\$1,720.50</b>	<b>\$1,760.37</b>	<b>\$26.20</b>	<b>\$1,786.57</b>	<b>\$66.07</b>	<b>3.8%</b>
<b>Research Infrastructure Stewardship Offset</b>	<b>-\$1.76</b>	<b>-\$1.76</b>	<b>-\$2.47</b>	<b>-</b>	<b>-\$2.47</b>	<b>-\$0.71</b>	<b>40.3%</b>
<b>RESEARCH INFRASTRUCTURE TOTAL</b>	<b>\$1,616.66</b>	<b>\$1,718.74</b>	<b>\$1,757.90</b>	<b>\$26.20</b>	<b>\$1,784.10</b>	<b>\$65.36</b>	<b>3.8%</b>

Totals may not add due to rounding.

<sup>1</sup> Includes only new mandatory funding. Excludes H1-B Non-Immigrant Petitioner mandatory funds.

<sup>2</sup> Academic Research Fleet funding includes ship operations and upgrades. Regional Class Research Vessels (RCRV) funding is no longer included on this line as it is proposed for an FY 2017 MREFC new construction start.

<sup>3</sup> Forward funding for the Cornell High Energy Synchrotron Source (CHESS) of \$1.97 million in FY 2015 reduced the amount required in FY 2016.

<sup>4</sup> Forward funding for the National High Magnetic Field Laboratory (NHMFL) of \$11.88 million in FY 2015 reduced the amount required in FY 2016.

<sup>5</sup> Other Facilities includes ongoing MPS support for the Center for High Resolution Neutron Scattering (CHRNS).

<sup>6</sup> Funding levels for MREFC Projects in this table include support for: a) concept and development associated with ongoing and requested MREFC projects provided through the R&RA account; b) initial support for operations and maintenance provided through the R&RA account; and c) implementation support provided through the MREFC account.

<sup>7</sup> Pre-construction planning includes funding for potential next generation multi-user facilities. This line reflects funding for Antarctic Infrastructure Modernization for Science (AIMS) for all three years and the Large Hadron Collider (LHC) upgrade for FY 2017 only. The LHC upgrade will be funded at \$2.50 million in FY 2017.

<sup>8</sup> Funding for the National Radio Astronomy Observatory (NRAO) includes operations and maintenance support for the Atacama Large Millimeter Array (ALMA). The substantial drop in support in FY 2017 is due to the separation of the Green Bank Observatory and the Very Long Baseline Array from NRAO and ALMA; this funding is now included under "Other Astronomical Facilities" in this table.

<sup>9</sup> National Solar Observatory (NSO) totals presented do not include \$5.0 million in FY 2015, \$9.0 million in FY 2016, and \$14.0 million in FY 2017 for operations and maintenance support for the DKIST facility construction project. That funding is captured within the total presented on the MREFC line.

<sup>10</sup> Funding for Research Resources includes support for the operation and maintenance of minor facilities, infrastructure and instrumentation, field stations, museum collections, etc.