

TABLE 5

**Department of Defense obligations for science and engineering research and development to universities and colleges, by type of activity: FYs 1990–2019**

(Dollars in millions)

Fiscal year	Research	Development		
		Total	Advanced technology development	Major systems development
1990	720.6	476.3	NA	NA
1991	841.7	482.7	NA	NA
1992	841.1	475.5	NA	NA
1993	1,132.0	456.2	NA	NA
1994	1,260.1	344.7	157.5	187.2
1995	1,108.1	503.3	152.9	350.4
1996	1,136.7	466.0	179.9	286.1
1997	1,042.1	479.5	188.8	290.6
1998	1,091.8	457.0	206.4	250.5
1999	1,153.6	537.0	213.2	323.8
2000	1,231.4	602.2	268.0	334.2
2001	1,376.5	582.8	101.5	481.3
2002	1,432.7	672.8	312.2	360.6
2003	1,553.6	675.1	309.4	365.7
2004	1,531.6	618.4	261.4	357.0
2005	1,596.9	566.1	254.2	311.9
2006	1,716.3	726.6	287.6	439.0
2007	1,957.7	695.5	339.0	356.6
2008	1,748.9	771.2	297.7	473.5
2009 <sup>a</sup>	1,976.6	992.5	388.0	604.6
2010 <sup>a</sup>	2,080.2	1,381.0	459.6	921.5
2011	2,028.4	1,088.2	345.5	742.8
2012	1,890.7	880.3	267.1	613.3
2013	1,669.5	839.2	299.0	540.3
2014	1,779.5	1,008.1	342.6	665.6
2015	1,936.8	742.0	185.6	556.4
2016	2,031.4	1,159.6	185.7	973.9
2017	2,478.0	1,175.2	190.7	984.5
2018 <sup>b</sup>	2,691.0	1,301.8	281.0	1,020.8
2019	2,662.7	2,016.7	959.5	1,057.2

NA = not available; data were not provided by agency.

<sup>a</sup> Includes American Recovery and Reinvestment Act of 2009 obligations.<sup>b</sup> Beginning with FY 2018, the totals for development do not include the Department of Defense (DOD) Budget Activity 7 (Operational Systems Development) obligations. Those funds, previously included in DOD's major systems development totals, support the development efforts to upgrade systems that have been fielded or have received approval for full-rate production and anticipate production funding in the current or subsequent fiscal year. The FY 2018 DOD reported obligations for Budget Activity 7 totaled \$5.3 million.**Note(s):**

Detail may not add to total because of rounding. DOD states that more than 90% of its development obligations reported for universities and colleges are performed at university-administered laboratories that are separate from academic departments. Furthermore, DOD states that much of its development obligations are for major systems development, that such obligations differ from its obligations for advanced technology development, and that DOD total development obligations are therefore not comparable with development obligations at other federal agencies. Refer to table 14 for DOD obligations to individual institutions, by R&D breakdown.

**Source(s):**

National Center for Science and Engineering Statistics, Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions.