TABLE 5

Department of Defense obligations for science and engineering research and development to universities and colleges, by type of activity: FYs 1990–2022

(Dollars in millions)

Fiscal year	Research	Development		
		Total	Advanced technology development	Major systems development
1990	721	476	NA	NA
1991	842	483	NA	NA
1992	841	476	NA	NA
1993	1,132	456	NA	NA
1994	1,260	345	157	187
1995	1,108	503	153	350
1996	1,137	466	180	286
1997	1,042	479	189	291
1998	1,092	457	206	251
1999	1,154	537	213	324
2000	1,231	602	268	334
2001	1,377	583	101	481
2002	1,433	673	312	361
2003	1,554	675	309	366
2004	1,532	618	261	357
2005	1,597	566	254	312
2006	1,716	727	288	439
2007	1,958	696	339	357
2008	1,749	771	298	473
2009[a]	1,977	993	388	605
2010[a]	2,080	1,381	460	921
2011	2,028	1,088	345	743
2012	1,891	880	267	613
2013	1,670	839	299	540
2014	1,779	1,008	343	666
2015	1,937	742	186	556
2016	2,031	1,160	186	974
2017	2,478	1,175	191	984
2018[b]	2,691	1,302	281	1,021
2019	2,663	2,017	960	1,057
2020	1,232	1,500	455	1,045
2021	2,592	2,028	1,106	923
2022	2,459	2,041	1,288	754

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

[a] Includes American Recovery and Reinvestment Act of 2009 obligations.

[b] Beginning with FY 2018, the totals for development do not include the Department of Defense (DOD) Budget Activity 7 (Operational System 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. For the FY 2020 survey, DOD science and engineering support to higher education institutions and DOD R&D support to nonprofit organizations are known to be understated. However, the magnitude of the missing data is unknown. Data users should use caution when conducting any time series analysis that includes DOD obligations data for FY 2020.

Source(s):
National Center for Science and Engineering Statistics, Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions; National Center for Science and Engineering Statistics, Federal Science and Engineering Support module of the Survey of Federal Funds for Research and Development.