

Table I-1. R&amp;D in the FY 2007 Budget by Agency

**Table I-1.** R&D in the FY 2007 Budget by Agency  
(budget authority in millions of dollars)

	FY 2005	FY 2006	FY 2007	Change FY 06-07	
	Actual	Estimate	Budget	Amount	Percent
<b>TOTAL R&amp;D (Conduct of R&amp;D and R&amp;D Facilities)</b>					
Defense (military)	70,269	72,485	<b>74,076</b>	1,591	2.2%
<i>S&amp;T (6.1-6.3 + medical)</i>	13,564	13,778	<b>11,214</b>	-2,565	-18.6%
<i>All Other DOD R&amp;D</i>	56,705	58,706	<b>62,862</b>	4,155	7.1%
Health and Human Services	29,161	29,111	<b>29,062</b>	-49	-0.2%
<i>Nat'l Institutes of Health</i>	27,875	27,805	<b>27,810</b>	5	0.0%
<i>All Other HHS R&amp;D</i>	1,286	1,306	<b>1,252</b>	-54	-4.1%
NASA	10,618	11,295	<b>12,202</b>	907	8.0%
Energy	8,620	8,721	<b>9,047</b>	326	3.7%
<i>Atomic Energy Defense</i>	4,009	4,062	<b>3,975</b>	-87	-2.1%
<i>Office of Science</i>	3,375	3,320	<b>3,798</b>	478	14.4%
<i>Energy R&amp;D</i>	1,236	1,339	<b>1,274</b>	-65	-4.8%
Nat'l Science Foundation	4,102	4,175	<b>4,523</b>	348	8.3%
Agriculture	2,410	2,411	<b>2,012</b>	-399	-16.5%
Commerce	1,121	1,074	<b>1,064</b>	-10	-0.9%
<i>NOAA</i>	646	617	<b>578</b>	-39	-6.3%
<i>NIST</i>	444	423	<b>450</b>	27	6.4%
Interior	621	635	<b>595</b>	-40	-6.2%
<i>U.S. Geological Survey</i>	546	559	<b>532</b>	-27	-4.7%
Transportation	707	838	<b>767</b>	-71	-8.5%
Environ. Protection Agency	641	600	<b>557</b>	-43	-7.1%
Veterans Affairs	742	765	<b>765</b>	0	0.0%
Education	308	302	<b>299</b>	-3	-1.0%
Homeland Security	1,240	1,281	<b>1,149</b>	-132	-10.3%
Int'l Assistance Programs	255	255	<b>255</b>	0	0.0%
Smithsonian	140	171	<b>174</b>	3	1.8%
Tennessee Valley Auth.	21	20	<b>22</b>	2	10.0%
Labor	5	5	<b>5</b>	0	0.0%
Nuclear Reg. Comm.	67	60	<b>67</b>	7	11.7%
Corps of Engineers	21	37	<b>11</b>	-26	-70.3%
Housing and Urban Dev.	45	55	<b>68</b>	13	23.6%
Justice	99	102	<b>98</b>	-4	-3.9%
Social Security	35	27	<b>27</b>	0	0.0%
Postal Service	41	41	<b>40</b>	-1	-2.4%
<b>Total R&amp;D</b>	<b>131,289</b>	<b>134,465</b>	<b>136,885</b>	<b>2,420</b>	<b>1.8%</b>
Defense R&D	74,641	76,900	<b>78,388</b>	1,488	1.9%
Nondefense R&D	56,648	57,565	<b>58,498</b>	932	1.6%

Source: AAAS, based on OMB data for R&D for FY 2007, agency budget justifications, and information from agency budget offices.

Note: The projected inflation rate between FY 2006 and FY 2007 is 2.2 percent.

All figures are rounded to the nearest million. Changes calculated from unrounded figures.

Table I-2. Distribution of the FY 2007 Budget

**Table I-2.** Distribution of the FY 2007 Budget  
(outlays in billions of dollars)

	FY 2005 Actual	FY 2006 Estimate	<b>FY 2007 Budget</b>	Change FY 06-07	
				Amount	Percent
Discretionary					
Defense	494	532	<b>524</b>	-8	-1.5%
Nondefense (Int'l + Dom.)	475	500	<b>505</b>	5	0.9%
TOTAL Discretionary	969	1,032	<b>1,029</b>	-3	-0.3%
Entitlements and Mandatory					
Social Security *	519	550	<b>581</b>	31	5.6%
Medicare *	294	338	<b>387</b>	49	14.6%
Medicaid	182	192	<b>199</b>	7	3.6%
Other Mandatory	390	448	<b>421</b>	-28	-6.2%
TOTAL Mandatory	1,385	1,529	<b>1,588</b>	59	3.9%
Net Interest	184	220	<b>247</b>	27	12.4%
Undistrib. Offsetting Receipts	-65	-72	<b>-94</b>	22	30.2%
<b>TOTAL Budget (Outlays)</b>	2,472	2,709	<b>2,770</b>	62	2.3%
TOTAL Receipts	2,154	2,285	<b>2,416</b>	130	5.7%
Unified Surplus or Deficit	-318	-423	<b>-354</b>	-69	-16.3%
<i>On-budget deficit</i>	-494	-602	<b>-544</b>	-59	-9.7%
<i>Off-budget surplus</i>	175	179	<b>189</b>	10	5.7%
Gross Domestic Product (GDP)	12,290	13,030	<b>13,761</b>	731	5.6%
Federal Budget as Percent of GDP	20.1%	20.8%	<b>20.1%</b>		

Source: Office of Management and Budget, *Budget of the U.S. Government FY 2007*.

Note: The projected inflation rate between FY 2006 and FY 2007 is 2.2 percent.

All figures are rounded to the nearest billion. Changes calculated from unrounded figures.

\* Excludes administrative costs for these programs, which are classified as discretionary.

FY 2007 figures exclude most Iraq and Afghanistan military costs.

Table I-3. Historical Trends in R&amp;D and Federal Outlays

**Table I-3.** Historical Trends in R&D and Federal Outlays  
(outlays in billions of dollars)

	FY 1970	FY 1980	FY 1990	FY 2000	FY 2007
	Actual	Actual	Actual	Actual	Budget
<b>Composition of Federal Outlays</b>					
<b>(Current Dollars)</b>					
Mandatory Programs *	61	262	568	951	<b>1,494</b>
Net Interest	14	53	184	223	<b>247</b>
Defense Discretionary	82	135	300	295	<b>524</b>
Nondefense Discretionary	38	142	201	320	<b>505</b>
TOTAL Federal Outlays	196	591	1,253	1,789	<b>2,770</b>
Federal R&D Outlays included:					
in Defense Discretionary	8	15	42	42	<b>77</b>
in Nondefense Discretionary	8	17	24	37	<b>59</b>
TOTAL R&D Outlays	16	32	65	79	<b>136</b>
<b>Composition of Federal Outlays</b>					
Mandatory Programs *	31.2%	44.4%	45.3%	53.2%	<b>53.9%</b>
Net Interest	7.4%	8.9%	14.7%	12.5%	<b>8.9%</b>
Defense Discretionary	41.8%	22.8%	23.9%	16.5%	<b>18.9%</b>
Nondefense Discretionary	19.6%	24.0%	16.0%	17.9%	<b>18.2%</b>
TOTAL Federal Outlays	100.0%	100.0%	100.0%	100.0%	<b>100.0%</b>
<b>Federal R&amp;D Outlays as Percent of Discretionary Outlays <sup>1</sup></b>					
Defense	10.1%	11.1%	13.9%	14.1%	<b>14.7%</b>
Nondefense	19.5%	11.9%	11.8%	11.5%	<b>11.7%</b>
TOTAL R&D as % of total discr.	13.1%	11.5%	13.0%	12.8%	<b>13.2%</b>
<b>Federal R&amp;D Outlays as Percent of GDP</b>					
Defense R&D	0.8%	0.6%	0.7%	0.3%	<b>0.6%</b>
Nondefense R&D <sup>2</sup>	0.7%	0.6%	0.4%	0.3%	<b>0.4%</b>
TOTAL R&D	1.6%	1.2%	1.1%	0.6%	<b>1.0%</b>

Source: *Budget of the United States Government FY 2007, Historical Tables.*

NA = data not available. \* - Net of offsetting receipts.

All figures are rounded to the nearest billion. Changes calculated from unrounded figures.

<sup>1</sup> R&D as a percent of its respective category (e.g., defense R&D as a percentage of defense discretionary).<sup>2</sup> Includes international and domestic R&D programs.

FY 2006 and 2007 figures exclude most Iraq and Afghanistan military costs.

Table I-4. Major Functional Categories of R&D

**Table I-4.** Major Functional Categories of R&D  
(budget authority in millions of dollars)

	FY 2005 Actual	FY 2006 Estimate	FY 2007 Budget	Change FY 06-07 Amount	Percent	% of Total ('07)
Defense <sup>1</sup>	74,641	76,900	<b>78,388</b>	1,488	1.9%	57.3%
Nondefense <sup>2</sup>	56,648	57,565	<b>58,498</b>	932	1.6%	42.7%
Space	9,664	10,366	<b>11,479</b>	1,113	10.7%	8.4%
Health	29,858	29,829	<b>29,783</b>	-46	-0.2%	21.8%
Energy	1,324	1,419	<b>1,363</b>	-56	-3.9%	1.0%
General Science	7,477	7,495	<b>8,321</b>	825	11.0%	6.1%
Environment <sup>3</sup>	2,245	2,202	<b>2,043</b>	-158	-7.2%	1.5%
Agriculture	2,094	2,098	<b>1,710</b>	-388	-18.5%	1.2%
Transportation	1,858	1,786	<b>1,505</b>	-281	-15.7%	1.1%
Commerce	465	453	<b>486</b>	33	7.3%	0.4%
International	255	255	<b>255</b>	0	0.0%	0.2%
Justice <sup>4</sup>	779	1,011	<b>895</b>	-116	-11.5%	0.7%
All Other	629	652	<b>657</b>	5	0.8%	0.5%
<b>Total R&amp;D</b>	<b>131,289</b>	<b>134,465</b>	<b>136,885</b>	<b>2,420</b>	<b>1.8%</b>	<b>100.0%</b>

Source: AAAS estimates based on data from OMB, agency budget justifications, and information from agency budget offices.

Classifications generally follow the government's budget function categories except health (which here includes health R&D in HHS and VA).

All figures are rounded to the nearest million. Changes calculated from unrounded figures.

<sup>1</sup> Includes DOD, defense R&D in DOE, and defense-related programs in DHS.

<sup>2</sup> Includes all R&D not in defense.

<sup>3</sup> Includes natural resources R&D.

<sup>4</sup> Includes most nondefense homeland security programs in DHS.

**Please see Chapter 1 for a discussion of this table.**

Table I-5. Defense and Nondefense R&amp;D by Character of Work

**Table I-5.** Defense and Nondefense R&D by Character of Work  
(budget authority in millions of dollars)

	FY 2005 Actual	FY 2006 Estimate	FY 2007 Budget	% Change FY 06-07	Distribution % '07 Total
<b>Basic Research</b>					
Defense	1,508	1,502	<b>1,456</b>	-3.0%	1.1%
Nondefense	26,170	26,332	<b>26,746</b>	1.6%	19.5%
Total Basic	27,678	27,834	<b>28,202</b>	1.3%	20.6%
<b>Applied Research</b>					
Defense	7,835	8,085	<b>6,889</b>	-14.8%	5.0%
Nondefense	20,999	20,730	<b>19,773</b>	-4.6%	14.4%
Total Applied	28,834	28,815	<b>26,662</b>	-7.5%	19.5%
<b>Development</b>					
Defense	64,704	66,567	<b>69,436</b>	4.3%	50.7%
Nondefense	5,406	6,901	<b>8,314</b>	20.5%	6.1%
Total Dev.	70,109	73,468	<b>77,749</b>	5.8%	56.8%
<b>Total Conduct of R&amp;D (basic and applied research + development)</b>					
Defense	74,047	76,154	<b>77,781</b>	2.1%	56.8%
Nondefense	52,574	53,963	<b>54,832</b>	1.6%	40.1%
Total Conduct	126,621	130,117	<b>132,613</b>	1.9%	96.9%
<b>R&amp;D Facilities and Capital Equipment</b>					
Defense	594	745	<b>607</b>	-18.6%	0.4%
Nondefense	4,074	3,602	<b>3,665</b>	1.7%	2.7%
Total R&D Facils.	4,668	4,348	<b>4,272</b>	-1.7%	3.1%
<b>Total R&amp;D</b>					
Defense	74,641	76,900	<b>78,388</b>	1.9%	57.3%
Nondefense	56,648	57,565	<b>58,498</b>	1.6%	42.7%
<b>Total R&amp;D</b>	131,289	134,465	<b>136,885</b>	1.8%	100.0%

Source: AAAS based on OMB data for R&D and agency budget justifications.

See Appendix 2 for definitions of terms.

All figures rounded to the nearest million. Changes calculated from unrounded figures.

Defense includes Dept. of Defense and defense programs in DOE and DHS.

**Please see Chapter 1 for a discussion of this table.**