

Table II-12. NASA R&amp;D

**Table II-12.** R&D in the National Aeronautics and Space Administration  
(budget authority in millions of dollars)

	FY 2003 Actual *	FY 2004 Estimate	FY 2005 Budget	Change FY 04-05	
				Amount	Percent
<b>Detail of NASA Budget:</b>					
<b>1. Exploration Capabilities (EC) / Space Flight Capabilities</b>					
<b>Space Flight</b>					
International Space Station	1,462	1,498	<b>1,863</b>	365	24.3%
Space Shuttle	3,301	3,945	<b>4,319</b>	374	9.5%
Space and Flight Support	352	432	<b>492</b>	60	14.0%
Institutional Support *	1,033	0	<b>0</b>	0	--
Total Space Flight	6,149	5,875	<b>6,674</b>	799	13.6%
<b>Exploration Systems <sup>1</sup></b>					
Human & Robotic Technology	0	679	<b>1,094</b>	414	61.0%
Transportation Systems	0	967	<b>689</b>	-278	-28.7%
Space Launch Initiative	815	0	<b>0</b>	0	--
Other & Institutional Support*	1,066	0	<b>0</b>	0	--
Total Exploration Systems	1,882	1,646	<b>1,782</b>	137	8.3%
<b>Total Exploration Capabilities</b>	<b>8,030</b>	<b>7,521</b>	<b>8,456</b>	936	12.4%
<b>2. Exploration, Science, and Aeronautics (ESA) / Science, Aeronautics and Exploration</b>					
<b>Space Science</b>					
Solar System Exploration	1,039	1,316	<b>1,187</b>	-129	-9.8%
Mars Exploration	500	595	<b>691</b>	96	16.1%
Lunar Exploration	0	0	<b>70</b>	70	--
Astronomical Search for Origins	685	899	<b>1,067</b>	168	18.7%
Structure & Evolution of Universe	402	406	<b>378</b>	-28	-7.0%
Sun-Earth Connection	480	755	<b>746</b>	-10	-1.3%
Institutional Support *	424	0	<b>0</b>	0	--
Total Space Science	3,531	3,971	<b>4,138</b>	167	4.2%
<b>Earth Science</b>					
Earth System Science	1,304	1,522	<b>1,409</b>	-114	-7.5%
Earth Science Applications	78	91	<b>77</b>	-14	-15.3%
Institutional Support *	335	0	<b>0</b>	0	--
Total Earth Science	1,717	1,613	<b>1,485</b>	-128	-7.9%

(continued)

Table II-12. NASA R&amp;D

**Table II-12.** R&D in the National Aeronautics and Space Administration (continued)  
(budget authority in millions of dollars)

	FY 2003 Actual *	FY 2004 Estimate	FY 2005 Budget	Change FY 04-05 Amount	Percent
<b>Biological &amp; Physical Research</b>					
Biological Sciences Research	269	368	<b>492</b>	124	33.6%
Physical Sciences Research	241	357	<b>300</b>	-57	-16.0%
Res. Partnersps. / Flt. Support	170	260	<b>257</b>	-3	-1.2%
Institutional Support *	203	0	<b>0</b>	0	--
Total Bio. & Phys. Research	883	985	<b>1,049</b>	63	6.4%
<b>Aeronautics</b>					
Aeronautics Technology	599	1,034	<b>919</b>	-115	-11.1%
Institutional Support *	405	0	<b>0</b>	0	--
Total Aeronautics	1,004	1,034	<b>919</b>	-115	-11.1%
<b>Education Programs</b>					
	199	226	<b>169</b>	-58	-25.5%
<b>Total ESA</b>	7,333	7,830	<b>7,760</b>	-70	-0.9%
3. Inspector General (non-R&D)	25	27	<b>28</b>	1	1.8%
<b>TOTAL NASA Budget</b>	15,388	15,378	<b>16,244</b>	866	5.6%
<i>minus non-R&amp;D activities:</i>					
Space Shuttle *	-3,301	-3,945	<b>-4,319</b>	374	9.5%
Other non-R&D *	-1,322	-432	<b>-492</b>	60	14.0%
Inspector General	-25	-27	<b>-28</b>	1	1.8%
Education & Training	-59	-65	<b>-71</b>	6	9.8%
<b>TOTAL NASA R&amp;D</b>	10,681	10,909	<b>11,334</b>	425	3.9%

Source: OMB R&D data for FY 2005, agency budget justification, and agency documents.

\* NASA restructured its budget in FY 2004 to reflect full-cost accounting.

FY 2003 budget figures include separate Institutional Support lines that are integrated with program costs in the new structure.

<sup>1</sup> These programs are reorganized beginning in FY 2004.

Program lines show FY 2003 program structure and also new program structure.

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

**Please see Chapter 10 for a discussion of NASA R&D.**