

About three quarters of the Federal Government's payments for scientific activities are for the operating costs of research and development. Table 8 reveals an interesting change in the relative importance of the performing organizations. Although the Government continues to perform most of this research and development within its own establishments, its support of outside research is increasing; in 1962-63 intramural expenditures were almost 80 p.c. of the total but in 1965-66 they accounted for only about 62 p.c. Financial support of industrial research and development has more than tripled during the past four years and now represents over one fifth of the Federal Government's current expenditures on research and development compared with about one tenth in 1962-63.

8.—Federal Government Current Expenditures on Research and Development, Years Ended Mar. 31, 1963-66
(Millions of dollars)

Performing Organization	1962-63 ¹	1963-64 ¹	1964-65 ¹	1965-66 ¹
Reporting unit.....	151.2	162.3	165.3	181.9
Canadian industry.....	29.2	35.9	45.0	69.7
Educational institutions and individuals at such institutions.....	17.4	20.0	26.8	37.9
Others (incl. non-profit organizations, other governments and foreign recipients).....	3.0	4.0	3.6	4.4
Totals, Expenditures.....	191.7	222.2	240.7	294.0

¹ Estimated.

As shown in Table 9, most of the federally financed research and development projects are in the physical sciences (over 70 p.c.). Engineering alone receives over 40 p.c. of the total funds available. Within the life sciences, almost half of the Federal Government's expenditures are for projects in support of agriculture.

The three most important areas of investigation are military science, which absorbs about one third of the funds spent on research and development, nuclear science and agriculture, fishing and forestry.

9.—Federal Government Current Expenditures on Research and Development, by Scientific Field and Area of Investigation, Years Ended Mar. 31, 1965 and 1966
(Millions of dollars)

Scientific Field	1964-65 ¹	1965-66 ¹	Scientific Field and Area of Investigation	1964-65 ¹	1965-66 ¹
Scientific Field			Scientific Field—concl.		
Physical Sciences.....	173.8	215.1	Life Sciences.....	66.9	79.0
Engineering.....	101.6	129.6	Agricultural sciences.....	32.3	35.4
Aeronautical.....	28.1	28.5	Biological sciences.....	18.7	22.1
Chemical.....	3.0	3.0	Medical sciences.....	15.9	21.5
Civil.....	2.0	2.4	Totals, All Scientific Fields.....	240.7	294.0
Electrical and electronic.....	21.9	30.5			
Mechanical.....	15.5	30.2	Area of Investigation		
Other.....	56.1	40.0	Nuclear science.....	39.3	44.9
Chemistry.....	15.6	18.2	Space travel and communications.....	4.7	9.4
Earth sciences.....	8.9	10.8	Military science.....	81.0	100.3
Metallurgy.....	3.8	4.2	Agriculture, fishing and forestry.....	50.2	57.9
Meteorology.....	2.1	2.5	Construction and building.....	2.9	3.1
Oceanography.....	4.4	4.7	Transportation.....	2.4	2.9
Physics, nuclear.....	11.9	14.5	Telecommunications.....	0.3	0.3
Physics, non-nuclear.....	20.9	22.6	Health and hygiene.....	15.3	21.0
Other.....	4.6	8.5	Industry, including mining.....	14.5	18.8
			Other.....	30.1	35.4

¹ Estimated.