

# The National R&D Effort

● R&D expenditures in the United States are expected to reach \$28.0 billion in 1972, up from \$26.8 billion in 1971.

● Research and development is expected to account for 2.5 percent of the 1972 U.S. gross national product (GNP), down from 2.6 percent in 1971. In 1964, the R&D/GNP ratio reached a high of 3.0 percent.

● Approximately 54 percent of the national R&D effort is supported with Federal funds, primarily from the Department of Defense and the National Aeronautics and Space Administration.

● The industrial sector is the second

largest source of R&D funds. It is anticipated that companies will provide two-fifths of total U.S. R&D funds in 1972, up steadily from 31 percent in 1964.

● An estimated 519,000 scientists and engineers (full-time equivalent) were employed in research and development during 1971, 5 percent fewer than in 1970. Nearly 70 percent of these R&D professionals worked for industrial firms.

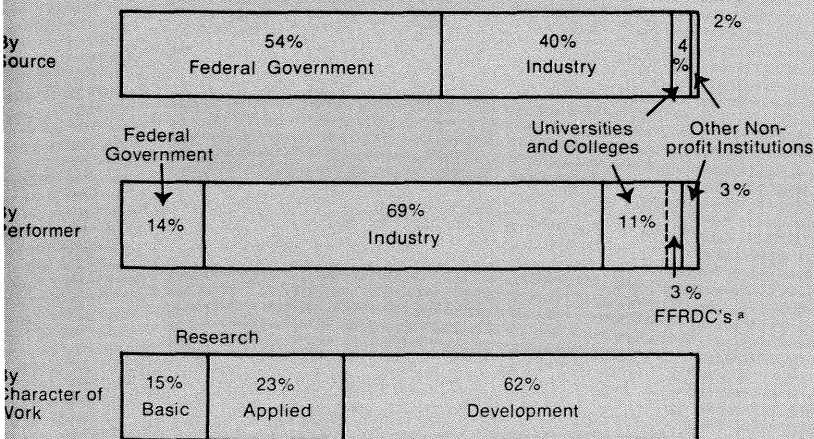
● More than one-third of the scientists and engineers in the United States are engaged in research and development. This ratio rose steadily during the fifties and early sixties; since 1964,

the proportion has declined somewhat.

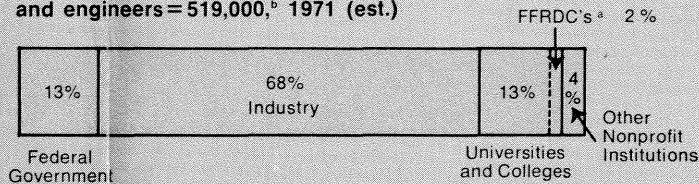
● Nearly 40 percent of the national R&D effort is devoted to research. For 1972, basic research expenditures are projected at \$4.1 billion, with applied research at \$6.4 billion. In 1971, \$4.0 billion and \$6.1 billion, respectively, were spent on these activities.

● Universities and colleges are expected to perform more than 55 percent of the national basic research effort during 1972, up slightly from 1971. Industrial firms are the leading performers of both applied research and development.

## Expenditures for Research and Development = \$28 billion, 1972 (est.)



## Employed R&D scientists and engineers = 519,000, 1971 (est.)



<sup>a</sup> Federally Funded Research and Development Centers administered by universities and colleges.

<sup>b</sup> Full-time equivalents.

Source: National Science Foundation.

Period	Average Annual Rates of Growth Percent					
	Current			Constant		
	Total	Federal	Non-Federal	Total	Federal	Non-Federal
1953-61	13.7	16.3	10.1	11.3	13.9	7.8
1961-67	8.4	7.7	9.7	6.3	5.6	7.5
1967-72	3.4	1.0	6.8	-1.0	-3.3	2.3

## National R&D Spending Patterns

(Current Dollars)

