

## Data Highlights

- Research expenditures currently account for about 36 percent of the national investment in research and development.
- Over 75 percent of university research expenditures will be devoted to basic research in 1970.
- Industrial firms will spend \$4.3 billion, primarily on product- and process-directed applied research in 1970.
- In recent years, the rate of growth of Federal research support has been curtailed. Overall spending on basic and applied research rose 5 percent annually between 1967 and 1970, while Federal financing increased less than 3 percent.
- Federal support accounted for 55 percent of total basic and applied research expenditures in 1960. In 1965, the share had risen to 60 percent, but has since declined to about 56 percent.
- A significant change in the relative importance of Federal research support in universities and colleges occurred in the latter part of the sixties. In 1960, Federal research support to universities and colleges amounted to \$387 million, or nearly one-half the total. This share rose to 60 percent, \$1.5 billion, by 1968, then dropped to the current level of less than 57 percent.
- The growth rate of Federal research support to universities and colleges declined drastically during the late sixties. Between 1960 and 1967, the annual rate was 20 percent. This dropped to less than 3 percent between 1967 and 1970. If the effects of inflation were removed, Federal support would have actually shown a decline.
- Non-Federal support of research in universities and colleges has gradually leveled during the past few years. Between 1960 and 1964, non-Federal support increased at an annual average rate of 13 percent; between 1964 and 1967 the rate had declined to 11 percent; a further decline to less than 8 percent is projected for 1967-70.

EXPENDITURES FOR BASIC AND APPLIED RESEARCH  
IN THE UNITED STATES  
BY SOURCE AND PERFORMER, BY SECTOR, 1960, 1964, 1967 AND 1970  
(Millions of Dollars)

SOURCE				
	1960	1964	1967	1970 (Est.)
<b>Total</b>	<b>\$4,419</b>	<b>\$6,860</b>	<b>\$8,515</b>	<b>\$9,850</b>

Federal	2,418	4,091	5,047	5,480
Industry	1,559	2,023	2,463	3,117
Universities & Colleges	317	541	733	925
Assoc. FFRDC's *	—	—	—	—
Other Nonprofit Institutions	125	205	272	328

PERFORMER				
	1960	1964	1967	1970 (Est.)
<b>Total</b>	<b>\$4,419</b>	<b>\$6,860</b>	<b>\$8,515</b>	<b>\$9,850</b>

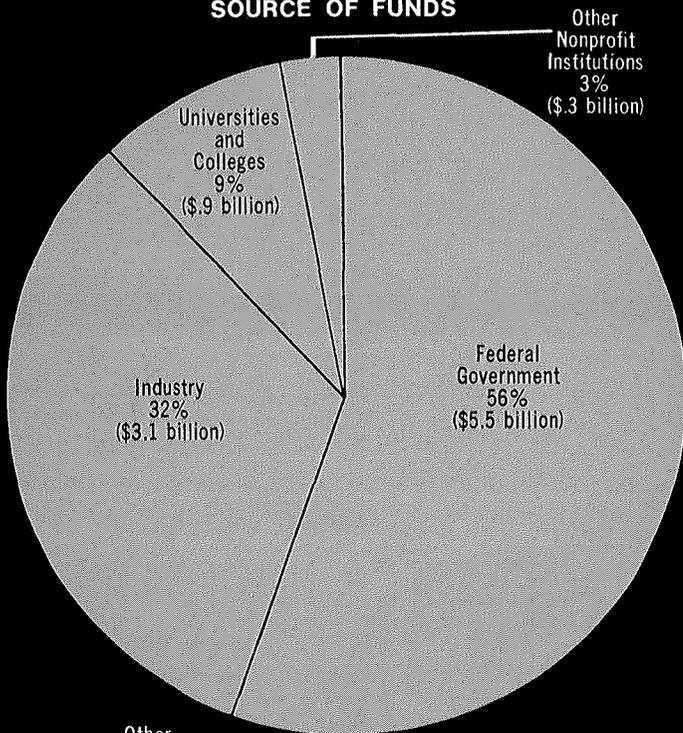
Federal	755	1,292	1,573	1,830
Industry	2,405	3,149	3,638	4,300
Universities & Colleges	791	1,555	2,239	2,570
Assoc. FFRDC's *	219	393	469	500
Other Nonprofit Institutions	249	471	596	650

\*Federally Funded Research and Development Centers administered by individual universities and colleges and by university-consortia.

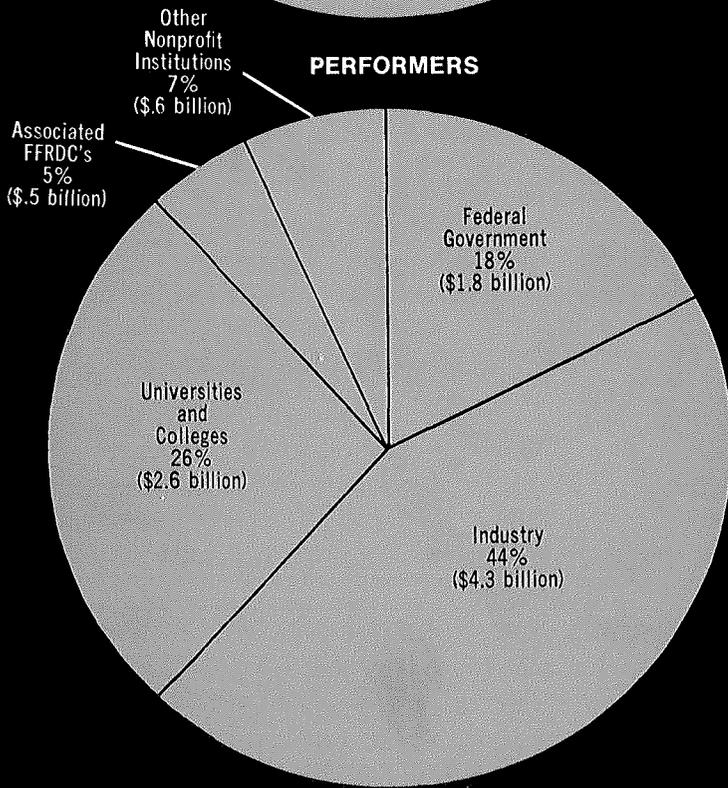
SOURCE: National Science Foundation, *National Patterns of R&D Resources 1963-70*, (NSF-69-30)  
Supt. of Documents, U.S. Government Printing Office, Washington, D. C. 20402.

**BASIC AND APPLIED RESEARCH IN THE UNITED STATES  
1970**

**SOURCE OF FUNDS**



**PERFORMERS**



**TOTAL RESEARCH = \$9.8 BILLION (EST.)**

**THE BACK COVER:**

*A scanning electron micrograph of a single-celled marine organism of the sub-class known as foraminifera. The pictured specimen is about .003 millimeter in diameter.*

*Photo Scripps Institution of Oceanography*

*The back cover of each issue of Mosaic will be devoted to a photograph of unusual aesthetic or visual impact resulting from the use of the camera as a tool of scientific research. Photographs for consideration are solicited. The photographer will be credited.*