has been well justified in practice, according to the Commission. Location of a proving ground within the United States, furthermore, has made it possible for civil defense personnel to take part in the tests, thus increasing the potential usefulness of the entire civil defense program.

The full report can be obtained (50 cents per copy) from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

National Science Foundation

Federal Research and Development Survey

According to information compiled by the National Science Foundation in connection with its continuing studies of the research and development activities of the federal government, \$1839 million was spent by federal agencies on scientific research and development during the fiscal year 1952. The corresponding estimate for the 1953 fiscal year is \$2189 million, and amounts included in the President's budget of January 9th for these purposes total \$2327 million for fiscal year 1954.

Funds administered by the Department of Defense accounted for about seventy-two percent of the 1952 total, compared with fourteen percent for the Atomic Energy Commission and four percent for both the National Advisory Committee for Aeronautics and the Federal Security Agency. The remaining funds were expended by twenty other agencies. Similar ratios are indicated in the estimates for fiscal years 1953 and 1954.

Obligations for increasing existing federal research facilities or construction of new laboratories amounted to \$307 million for 1952, of which \$198 million was for the Department of Defense, \$60 million for the AEC, and \$31 million for the NACA.

The table at the bottom of this page summarizes all information assembled by NSF on obligations and expenditures for research and development for the three fiscal years. Reporting agencies include the Agriculture, Commerce, Defense, Interior, Labor, Post Office, State,

and Treasury Departments, the Atomic Energy Commission, Federal Civil Defense Administration, Federal Communications Commission, Federal Security Agency, Government Services Administration, Housing and Home Finance Agency, Interstate Commerce Commission, National Advisory Committee for Aeronautics, National Science Foundation, National Security Resources Board, Office of Defense Mobilization, Reconstruction Finance Corporation, Smithsonian Institution, Tariff Commission, Tennessee Valley Authority, and Veterans Administration.

Graduate Students in Science

Survey Says More Could Be Accepted

A nation-wide survey of graduate students in the natural sciences, recently completed for the National Science Foundation by the Office of Scientific Personnel of the National Research Council, indicates that graduate schools in this country could accept nearly 8000 more students for doctoral studies and about 11,400 more students for work towards masters' degrees in science.

The survey of the graduate science population and the training potential of the nation's graduate-science institutions, covering the academic year 1951, finds that 7800 of the 16,250 first-year graduate students have the necessary qualifications to earn doctoral degrees, but predicts that nearly three out of five of these "doctoral-potential" students probably will not complete their studies to the doctorate. Twenty-nine percent more first-year graduate students can now be accepted by American universities and graduate schools, according to the survey, which indicates that the large college graduating classes of 1949 and 1950 will result in a peak of new doctorates in 1953, with a probable decline beginning in 1954. There were altogether about 39,800 graduate students receiving training in the natural sciences during 1951.

The ten fields reporting the largest number of graduate students in 1951 were chemistry (6872), psychology

Estimated Obligations and Expenditures (in millions of dollars) of the Federal Agencies for Scientific Research and Development in Fiscal Years 1952, 1953, and 1954, as compiled by the National Science Foundation.

Agency	Obligations			Expenditures		
	1952 (Actual)	1953 (Estimate)	1954 (Estimate)	1952 (Actual)	1953 (Estimate)	1954 (Estimate)
Department of Defense	1705	1850	1805	1315	1600	1700
Atomic Energy Commission	229	262	281	250	292	288
National Advisory Committee for Aeronautics	82	95	71	67	76	95
Department of Agriculture	56	66	61	57	60	69
Federal Security Agency	53	67	78	65	74	65
Department of Interior	36	36	39	33	37	39
Department of Commerce	31	23	39	28	24	39
Other agencies	25	28	37	24	26	32
Total, all agencies	2216	2427	2411	1839	2189	2327

Note: Column items may not add to totals due to rounding.