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The Federal Science Budget

In the 1966 federal budget, which was summarized in *Science* last week, one explanatory statement concerning funds proposed for the National Science Foundation will be of particular interest in the universities, for it states an objective that must have been involved in much of the thinking concerning basic scientific research and higher education: "Major emphasis in 1966 is on providing funds in the Foundation budget to maintain an adequate rate of growth in Federal support for research in colleges and universities. Funds are also included for increased support for graduate training in the sciences and engineering and for strengthening science programs at developing institutions."

Accordingly, the President requested that NSF funds for research grants be increased by 51 percent, enough to allow an increase from 2900 grants in 1965 to 4300 in 1966. Funds for institutional grants—including the new science development grants—are 27 percent above 1965.

Relatively smaller increases are planned in the budgets of other agencies. Research grant funds requested for the National Institutes of Health are up by 8 percent. NASA plans to increase expenditures for research in physics and astronomy by 23 percent and in the biosciences by 5 percent.

Money for fellowships and traineeships in the NSF budget would increase the number of graduate students supported from 7725 to 8810. The NIH fellowships and training grant funds are scheduled to increase by 13 and 7 percent, respectively. A larger budget for the Office of Education will allow an increase in the number of graduate fellowships from 5883 to 10,494, and in the number of student loans, from 317,000 to 340,000. The Office of Education fellowships and loans will go to students in many fields, including science and engineering.

Of related interest is the fact that the President has requested \$98 million for the Office of Education (in comparison with \$37 million in 1965) "for invention and testing of new ways of learning, including design of curricular materials."

From 1948 through 1964, the total federal R&D budget increased at an average rate of about 20 percent a year. Obviously that rate could not be sustained much longer; the annual total now exceeds \$15 billion and represents more than 15 percent of the entire budget. Warnings of a necessary leveling off are clearly being borne out; the 1965 and 1966 totals will exceed those for the previous year by from 2 to 5 percent.

At the basic research end of the spectrum, however, substantial increases continue; there has been an average increase of 12 percent a year for the past 2 years. Ten years ago about 7 percent of federal R&D money went into basic research. The percentage has increased to 12 in 1964, 13 in 1965, and a budgeted 14 in 1966.

Congress will have its way with all these figures. There would be no violation of precedent if some were decreased and others increased. But at this stage it is clear that there is a leveling off in the total of R&D funds and that there continue to be substantial increases for basic research and the support of graduate students.—DAEL WOLFLE