passed a bill which followed the major lines of the Bush proposal. Truman, however, vetoed it, expressing dissatisfaction on several points. His major objection is stated in the following excerpt from the veto message.

. . . this bill contains provisions which represent such a marked departure from sound principles for the administration of public affairs that I cannot give it my approval. It would, in effect, vest the determination of vital national policies, the expenditure of large public funds, and the administration of important governmental functions in a group of individuals who would be essentially private citizens. The proposed National Science Foundation would be divorced from control by the people to an extent that implies a distinct lack of faith in democratic processes.

By the time a National Science Foundation with an "in-line" administrative structure was created in 1950, the basic pattern of government-sponsored research in universities had been set by other agencies. The Navy, at the end of the war, led the way in finding a formula to maintain contact with civilian scientists through its Office of Naval Research. The Atomic Energy Commission soon had its own major extramural research program and medical research was increased under the auspices of the Public Health Service.

A framework for postwar federal science was already erected when Truman addressed the centennial meeting of the AAAS in September 1948 and set out the following priorities for science, which were in fact to be followed:

Two years ago, I appointed a Scientific Research Board. Its report, entitled Science and public policy, was submitted last fall to the 80th Congress. That report stressed the importance of science to our national welfare, and it contained a number of important recommendations. The most important were these:

First, we should double our total public and private allocations of funds to the sciences. We are now devoting, through Federal and private expenditure, little more than \$1,000,000,000 for research and development per year. With a national income of more than \$200,000,000,000 annually, the Board felt that we should devote at least \$2,000,000,000 to scientific research and development each year.

Second, greater emphasis should be placed on basic research and on medical research.

Third, a National Science Foundation should be established.

Fourth, more aid should be granted to the universities, both for student scholarships and for research facilities.

Fifth, the work of the research agencies of the Federal Government should be better financed and coordinated. For advice on issues involving science Truman appears to have depended on contacts with leading scientists who had been involved in the wartime mobilization. Particularly in his early years in the White House he appears to have relied on men like Conant, Bush, and Oppenheimer. Later he met with members of the Atomic Energy Commission and the AEC's General Advisory Committee. Truman seems to have valued the opinions of Alan T. Waterman, who headed the Office of Naval Research, and the President is reported to have said he would nominate anyone the National Science Board suggested to be the first director of NSF as long as it was Waterman.

It was not until 1950 that the groundwork was laid for the formal science advisory structure that later developed in the White House. Efforts

Area Studies under the Axe

The federal program that has provided funds for the support of foreign language and area studies programs in major universities for the past 15 years is reportedly a disaster area in the forthcoming budget. According to word that is being regarded as fiscal gospel in Washington, the sum on the foreign languages and world affairs line of the higher education budget will be cut from \$15.3 million in the current fiscal year to zero next year.

Rumors are rampant that the education budget will show heavy reductions almost across the board. Congress, of course, must act on the President's recommendations and doubtless will oppose many specific cuts. The language and area studies program, however, is said to be one the Administration is determined to cut.

The program originated in the National Defense Education Act passed in 1958. Title VI of that act was intended to encourage the teaching of languages "critical" to national defense, and the program provided the first substantial federal funds for the study of Russian, Chinese, and other, more exotic languages, as well as for comprehensive studies of areas of Africa, Asia, the Middle East, and Latin America.

Over the years, funds have flowed primarily into two programs. One supported language and areas studies "centers," the other funded graduate fellowships in relevant disciplines. Currently, some \$7 million is going into 106 centers at 63 universities and about the same amount into financing the fellowship program. Most of the funds go to major research universities in the Northeast, Midwest, and West Coast.

These programs have been in similar jeopardy for at least the past 2 years. The American Association of Universities, whose membership comprehends the major research universities, is understood to be protesting the prospective gutting of the program to the White House. Two years ago, an AAU delegation came away with what they regarded as a firm commitment from the President that the existing program would be continued at least until a National Foundation for Education was established.

In at least one case in the past, the intercession of former Nixon adviser Daniel Patrick Moynihan has been credited with reprieving the program. The program's university constituency has been regarded as ineffectual in lobbying, probably because the interests of its members are divided over so many languages and areas that it is hard to perceive a common interest. Partisans of the program, however, point out that, of all the categorical programs in higher education, the languages and areas program is perhaps the most important to the national interest at this juncture.

Direct federal support of the centers averages only about 10 to 12 percent of their operating budgets, but fellowships add substantial funds. The demise of the federal program would also mean loss of the primary source of funds for faculty research abroad.—J.W.