the decision not to attempt to have it prescribe a *national* land use policy. Last fall, when an earlier version of the land use bill was under debate, the Senate turned a deaf ear to a proposal by Senator Edmund Muskie (D-Maine) to include substantive policies in the bill which, among other things, would have required that the states ordinarily exclude development from areas such as prime farmlands, flood plains and wetlands, and wild areas. The general policy would have been to favor redevelopment of existing communities and urban areas.

Although the Senate bill calls for special protective policies for areas of critical environmental concern, the states would be permitted wide discretion in defining the extent of those areas and the nature of permitted uses—and, indeed, with the sanctions provision eliminated, a state would be free not to adopt any program of land use controls whatever. By way of specific environmental standards the bill does little more than say that air and water quality standards prescribed under existing law must be observed and that

land sales projects must not be located in natural hazard areas or built in such a way as to destroy natural values.

As pointed out in the report of the Senate Interior Committee, "there is virtually no consensus on the possible substance of national land use policies." Senator J. Bennett Johnston (D-La.) had, for instance, no doubt spoken for many when he disputed Senator Muskie's proposition that development must be excluded from flood-prone areas (Johnston contended that such a policy might apply to as much as a third of the land in his home state). To cite another example, the concept of preserving prime farmlands arouses much disagreement, not least among farmers, many of whom cherish the right to sell their land to developers for a handsome capital

The one major point on which a consensus exists is that there is a need to establish a *process* of state land use regulation. The Senate bill does provide that, 3 years following its enactment, the Interagency Advisory

Board will recommend to Congress such legislation as it may deem necessary for the establishment of national land use policies. In this endeavor the board will be aided by reports from the Council on Environmental Quality and the states.

If the pending land use legislation does soon become law, as seems likely, some improvement in land use practices should result. The legislation, however, has a number of inherent weaknesses. In 1972, the Florida Legislature, by passing the Florida Environmental Land and Water Management Act, anticipated the proposed national land use law to a remarkable degree, for both the new Florida law and the national legislation are based on the ALI model code. Some major problems that appear to be arising under the Florida law will be examined in a second article.

-LUTHER J. CARTER

(Carter, a staff writer with Science, is completing a study of land use policy in Florida for Resources for the Future, Inc.)

Higher Education: Study Urges Altered Thrust in Federal Support

The federal government, whose funding policies in higher education have a coagulant effect on the status quo, should adjust its strategies to encourage flexibility, autonomy, and diversity among the nation's colleges and universities.

Such is the gist of "National Policy and Higher Education," a major report commissioned for the Department of Health, Education, and Welfare. The report is the second half of a project headed by Frank Newman, director of university relations at Stanford. The first half, which came out in early 1971 (Science, 19 March 1971), pointed out that higher education, despite its phenomenal postwar growth, was not adequately meeting the needs of the 1970's, but was becoming increasingly homogeneous, bureaucracy-laden, and rigid. In that report the task force broadly outlined how "going to college" could

be transformed from a 4-year lockstep for 18- to 22-year olds into a flexible and diverse system offering a variety of experiences in tune with the needs of the young, the not young, the part-time students—in short, anyone who wants to learn.

Then secretary of HEW Elliot Richardson was so pleased with the report that he asked Newman to come back with another one on how the federal government could stimulate the recommended changes. Newman says the reason part two took so long is that the members, who served without federal compensation, are not "professional task forcers," but persons with full-time jobs to attend to.* Besides, they were

busy asking themselves "very fundamental questions"—such as what the implications are of the current egalitarian approach to education.

The report points out that, since the beginning of the century, access to higher education has gone through three stages. Originally it was for the "aristocracy," and then scholarships made merit the prime criterion for admission. With the social movements of the 1960's, "equal access to all" became the cry. Now, suggests the report, is the time for a more realistic interpretation of this egalitarian approach—that is, the availability of higher education should be based on the motivation of the individual. College was once the key to high income and prestige; now, the report points out, it is only one avenue-for 60 percent of America's wage earners, the presence or absence of a degree has no effect on their incomes. (This does not mean that people should be discouraged from going to college, but that they should go with "realistic expectations" of what they want to accomplish.)

Federal financing practices have so intruded into higher education that they have distorted supply and demand, notes the report. Where funds go are too

^{*} Panel members were Christopher Cross, House Education and Labor Committee; Don Davies, Yale University; Russell Edgerton, Fund for the Improvement of Postsecondary Education; Martin Kramer, HEW; and Bernie Martin, National Institute of Education. The reports will be issued as a book next January by MIT Press.

NEWS & NOTES

• AEC DECLASSIFICATION DRIVE MOVES ON: The Atomic Energy Commission has undertaken a major effort to declassify its nationwide files. Although the AEC has been declassifying "areas of information" since the early 1950's, this is not to be confused with declassification of the actual files and records, which is the purpose of the current drive. Of the more than 2.1 million documents that have been reviewed (from AEC and contractor files in Tennessee, Washington, New Mexico, and Illinois), 53 percent were declassified. Review of the records at AEC headquarters is soon to be completed. Files in Nevada, California, South Carolina, New York, and Ohio are still to be examined.

• NEW ASSISTANT DIRECTOR AT NSF: The long-vacant post of assistant director for education at the National Science Foundation has been filled by Lowell J. Paige, who was nominated by President Nixon in August and confirmed by the Senate on 11 October. The assistant directorship had been vacant for more than 2 years after the resignation of Lloyd G. Humphreys (Science, 17 September 1971) in protest of NSF science education budget cuts. Paige was formerly dean of physical sciences and professor of mathematics at the University of California

• CEO CHIDES AGENCIES: A memorandum put out by the Council on Environmental Quality states that, under the National Environmental Policy Act, responsibility for the public availability of environmental impact statements rests on the originating federal agencies. Some agencies have tried to make the National Technical Information Service (NTIS) the primary distributor of impact statements to the public. The CEQ memo states further that "Initial printings of the statement should be sufficient to meet the anticipated demand not only of agencies, organizations, and individuals who must receive copies as required by CEO guidelines, but also for a reasonable number of additional requests. NTIS should be considered a secondary source. . . ." The agencies are also urged to make every effort to make the statements available to the public without charge. Some statements run to several thick volumes.—S.B.M.

often dictated by "legislative formulas or administrative restrictions" rather than student choice. Furthermore, funding mechanisms have, in effect, made the federal government "direct operator or general financial patron of institutions," influencing growth and decision-making which should properly be in the school's own or the state's domain. Examples are an institution's accounting and financial practices, faculty accreditation, publishing of research, and the method in which it handles student disorders.

A key assertion of the report is that grants, in most cases, should go to students rather than institutions. If graduate fellowships and training money to institutions were replaced by "portable fellowships" to students, the task force believes, schools would be freer to follow their own bent. Also suggested is a "G.I. Bill for Community Service" designed to "legitimate breaking the educational lockstep" for postsecondary students, who could accrue educational benefits during a period of work in some national or regional service program. The task force says more students in work-study and internship programs should receive support, and that federal restrictions on student aid, such as age and time limits, should be lifted.

A major thrust of the report is the need to loosen up the system so it can become more responsive to the demands of the student market. "We believe," says the task force, "that the federal government will have an increasingly important role to play as an agency of anti-trust in education." By this is meant, in the words of task force member Russell Edgerton, the government should use the tools already available to counter the danger that higher education is turning into a "big service bureaucracy." Not only is innovation being strangled by the bureaucratic paraphernalia of grantsmanship, but the proliferation of professional guilds and accrediting agencies is unnecessarily tightening access routes to many professions. The report says the government should encourage states to investigate licensing and accrediting mechanisms with an eye to removing educational requirements that are irrelevant to needed proficiencies. In keeping with this attitude the task force believes degrees should be awarded on the basis of competence rather than educational credits.

As Newman points out, the federal government is already into higher education "up to its ears." What it needs

to do, says the report, is stop reinforcing current rigidities and instead use its financial leverage to encourage diversification and competition among institutions, both public and private. One suggestion is that grants be used to lower the tuition differential between public and private schools. The task force proposes that federal matching grants be given to states for student aid programs and experimental educational and administrative approaches. Thus, states would be encouraged to "develop strategies for accountability which rely more on competitive forces and incentives," than on direct management. The idea is that schools will then thrive according to how well they meet the needs of their students rather than how they stack up in relation to administrative criteria.

Too often . . . federal attention has been devoted primarily to organizational tidyness and bureaucratic convenience. . . . With every passing year, our postsecondary education system becomes further entangled in laws for licensing, educational requirements for credentials, and more specialized procedures. Each year the role of private, municipal, and community-controlled higher education diminishes. Each year, the autonomy of the campus erodes as influence or control over some further aspect of the educational process moves toward a multi-campus system headquarters, a governing board, a licensing agency, a faculty union, a state or federal court, or a legislature.

The report sees possible unpleasantness on the horizon for minority groups—"new resistance for minority progress in graduate school admissions" is appearing as a result of increased pressure for admission from white males and "newly liberated women." This could be particularly unfortunate because "the relationship between higher education and mobility for minorities seems more direct than for white students." The report suggests that more graduate-level fellowships be made available for minority students, and, to nurture educational diversity, that more federal aid be targeted to black and ethnic colleges, whose important roles have diminished as more talented faculty and students have been drawn to predominantly white institutions.

The report also notes that the present glut of college graduates will continue through the decade, so many will be "underemployed" in clerical or service professions. Whether this phenomenon will enhance the quality of service or create a stockpile of raw material for the revolution the report does not say.—Constance Holden

at Los Angeles.