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Science Advice for State Governments

In *Science* for 19 April, Harvey M. Sapolsky discussed the science advisory agencies that have been established by 22 state and territorial governments and five cities. Many of them have not worked well, and about half have lapsed. Inexperience and insufficient support have hampered some. State governments usually have few scientifically and technically competent members of the state bureaucracy who can understand, interpret, and implement the recommendations of an advisory body. Moreover, scientists would rather work on national than on local problems.

Underlying such specific reasons for the difficulties encountered by state advisory bodies is a major difference between state governments and the federal government. At the national level it has been necessary to deal with technical problems of military equipment, atomic energy, and space exploration. At the national level the scale is larger—in cost, in information-handling requirements, and in power. The federal government therefore earlier found it necessary to establish a variety of scientific advisory bodies.

The need at the state level came later, but will undoubtedly increase. State governments will require an understanding of scientific and technical matters in order to deal effectively with a variety of concerns: pollution problems; educational improvements; crime prevention; and the effort to preserve enough of the natural environment to provide protection against irreversible damage while also balancing the needs of economic development with the amenities of open space, the preservation of natural areas, and the provision of recreational facilities.

State and federal governments already share costs and responsibilities on some of these matters—for example, highway construction, education, and industrial innovation. In some areas of pollution control, states may establish their own standards, but the federal government retains authority to impose its standards if those of the states are not deemed adequate.

Governmental trends, increasing reliance on large-scale technology, increasing pressure to keep technology under social control, and the practical desire to be able to negotiate on reasonable parity with the federal agencies all make it seem highly likely that state science advisory bodies will increase in number and in responsibilities within a few years. (The oldest existing one dates only from 1959.) Political leaders will have to take the initiative in their development, but scientists and scientific organizations can sometimes help them see the need.

If this forecast is reasonable, there will be need—or opportunity—for a number of scientists to serve on state advisory bodies, and also need for more full-time employees who are knowledgeable about technical matters. There will also be a special opportunity for one or more universities. There are now more than a score of university departments or programs for teaching and research on science and government, or science and public policy. Most have concentrated on the political science of our constitutional government and the ways in which it has adapted to the burgeoning of science and technology. A university that chose to specialize in the study of the relations between state (and perhaps large city) governments and science and technology would pioneer a different area of specialization, and could begin its studies practically at the beginning of the development of formal means of providing science advice to state governments.—DAEL WOLFLE