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Intergovernmental Science and Technology

There is a growing awareness, both in Washington and throughout the country, that if science and technology are to benefit our people more effectively, a better R & D partnership must be established between the federal government and the states, counties, and cities. Properly designed and directed toward state and local needs, federally supported R & D could help to protect regional and local environments, reduce demands on energy and various natural resources, and improve the delivery of state and local services.

In recent years, federal funding of R & D for the civilian sector has been growing rapidly. It is now in excess of $7 billion annually. But its impact on meeting public expectations—on filling the everyday needs of the people—often seems disappointing.

Past intergovernmental science and technology programs have been primarily one-sided affairs, relying heavily on the federal government offering money and off-the-shelf technology to the states and cities with little concern for or understanding of the user's needs. Much of this technology was the spin-off of aerospace and military R & D which might be adaptable to the needs of a local fire or police department or serve some other public need. In addition, there were programs to supply governors and mayors with science and technology advisers.

These efforts at domestic technology transfer in several cases have met with some success. But the residual problems at the state and local levels remain enormous and deserving of a greater effort. Clearly some new stimuli and new approaches are needed.

A feeling is now developing along the lines that intergovernmental action in science and technology must become more of a two-way flow. More initial state and local involvement in setting federal R & D agendas appears to be one way of generating this. Governors, mayors, state legislators, and county and local officials have far better ideas of the problems and the needs of their communities than do Washington officials. They should have more of an input into the decision-making that results in federal R & D budgets in the civilian sector.

A related problem is that much federally generated R & D that might be applicable to public use on a state or local level is not adequately assessed or demonstrated. As a result, its usefulness cannot be properly evaluated. In many cases, research that might ultimately serve a public purpose is not carried far enough into application, implementation, or the federal commercialization stage. This situation could be improved by more attention and closer cooperation between federal and state and local officials concerning research utilization.

There have been some encouraging signs along these lines. The Department of Transportation has become a leader in soliciting views of state and local governments on research needs and in working with them to develop technologies. The National Science Foundation has supported a number of mechanisms including the Urban Consortium and various science networks to strengthen the capacity of state and local governments to use science and technology.

A new thrust toward building a better partnership on a government-wide basis has been the formation of the Intergovernmental Science, Engineering and Technology Advisory Panel as part of the Office of Science and Technology Policy in the Executive Office of the President. This new advisory group, composed of four governors, four mayors, and eight other state and local government officials, is already grappling with ways to improve the intergovernmental science and technology enterprise.—FRANK PRESS, *Director, Office of Science and Technology Policy, Executive Office of the President, Washington, D.C. 20500,* and GEORGE BUSBEE, *Governor, Office of the Governor, Atlanta, Georgia 30334*