The critical problems to be addressed by all these kinds of institutions are generally not those of enormous technical complexity. Two major exceptions to this generalization, where major technological advances are needed, are the problems of developing automatic fingerprint recognition systems and nonlethal, noninjurious, but effective police weaponry.

Rather than technical, the problems are more often ones of selecting from a menu already rich in technical possibilities. That selection must take into account the operational needs of operating agencies, the danger of excessive invasion of privacy, as well as the technical characteristics of a new system. Then, there are additional problems in adapting a technical design to an operationally desirable form—human engineering, but in a very broad sense—and finding the best means of incorporating the innovations into regular operations.

This last task—of intimate technical adviser—is the kind of role performed by the service laboratories in the Department of Defense. Any organization that is to participate in this process for the criminal justice system must commit itself to a continuing involvement with the problems of crime control, including intimate interaction with the operating system. It must use that system as its laboratory, to collect data, to try out different innovations—always making sure that these do not violate basic rights of privacy, justice, and due process. After both the direct and side effects of an innovation are evaluated, the technical adviser can then identify the next round of innovations, thereby becoming involved in a continuing process of evolutionary improvement.

In considering retreading of existing Federal laboratories, many of which are in remote parts of the country, location may be an important consideration. The requirement for direct involvement with the operating system requires that such an organization be close to a major metropolitan area, just as our oceanographic institutes must be on the water and our radio and optical astronomy observatories must be separated from their respective interfering noise sources.

The technical skills of the organization must match those called for by the problems. Any institution working on crime control must possess a broad range of technical skills, including computer sciences, electronics, and the physical sciences. It should be especially strong in systems analysis and the social sciences.

Mr. DADDARIO. Are you going to give us some advice as to how to rate the cities?

Dr. BLUMSTEIN. I suspect that the process of choosing any location will apply. The resource availability, the opportunity for innovation, the pull of interests reflected in any decision——

Mr. DADDARIO. Do you think in this case it might work the other way, that the city might not want to be known as the one where the crime institute is located?

Dr. BLUMSTEIN. I know several cities that would love to have the crime research center located there, cities that are really interested in innovation.

I might add that the institution should be prepared to add lawyers and legislators to its staff.

Any such laboratory must get the insight that we on the Science and Technology Task Force were most fortunate to be able to get