demonstrated. Whether it will produce more rapid technologic answers than those normally developed in the past likewise remains to be shown. At any rate, it is worth trying this additional route for research and development if for no other reason than to rescue this field of activity from low public interest and equally low technologic progress.

Of the major contributors to air and water pollution, solid wastes are proportionately the least significant. Present methods of disposal of the solid wastes of society are too often aesthetically objectionable or undesirable. Present legislative acts are calculated to upgrade public opinion and official behavior, by providing more for research and development in science and technology.

As in the other pollution issues hitherto discussed, the same unverified assumption is made in the present category of problem as in the previous ones, namely:

> This is a challenge which State and local governments cannot meet without assistance from the Federal Government. The handling and disposal of solid wastes are costly operations that strain the resources of State and local agencies (refer to committee report on clean air of 1965, p. 7, 1965).

No evidence to justify this broad statement appears in any of the testimony. Thousands of public disposal units in the United States are locally financed and operated. That more do not exist or are not improved is due to local acceptance of the status quo, to disinterest in aesthetic values, to lethargy, and to the normal behavior of officials and citizens pressed for many other public expenditures. Are all these to be cured by Federal legislative fiat and money? Or are we warranted in assuming that research in solid waste disposal under Federal stimulation and aid will disclose better and more economical procedures and practices than we now have? Let us look at the nature of the problem.

The annual output of urban solid wastes, containing such things as paper, grass and brush cuttings, garbage, ashes, metal, and glass has been estimated as 1,600 pounds per capita or over 125 million tons each year. The collection and disposal costs approximate between $2.5 and $3 billion a year.

No easy answer to either collection or disposal has so far appeared. Early efforts at salvage or recovery of materials have gradually given way to high-temperature destruction, as organic constituents of garbage were drastically reduced by refrigeration and modern packaging and as markets dwindled for grease, low-grade fertilizers, mixed metals, and glass. Easy answers in composting have not materialized sufficiently to offer simple and economical solutions to most urban areas, where increasingly long-haul collection costs to central disposal points are becoming prohibitive.

Most of these problems wait for solution upon scientific and technologic inquiry, by the combined forces of public and private agencies. The delusion that urban solid wastes represent a hidden "gold mine" of recoverable materials still awaits realistic demonstration.

A similar lack of realism characterizes the current solution of regionalizing solid waste collection and disposal—as if this were purely a semantic rather than an economic problem. In many instances, handling the issue upon a regional basis becomes a com-