The foregoing estimates appear to be reasonable in the light of the capital requirement projections made by 20 metropolitan or regional planning commissions in urban and in some urban rural areas. These agencies in 1966 estimated that each of them should, realistically, spend an average of $7.5 million during the 1966–75 decade, on capital investments for refuse collection and disposal facilities. Since there are 216 metropolitan urban areas in this country, their total capital investment needs are calculated at $1.6 billion. Since such areas, however, account for about 70 to 75 percent of the population, the total U.S. investment needs on this basis can be extrapolated to $2.1 billion to $2.3 billion.

A graphic presentation of the trends in annual expenditures for sanitation on the State and local government levels is given in exhibit I (following) for comparison purposes. The exhibit indicates that those expenditures grow much faster than the population. This is in line with the findings of waste disposal studies made for a number of areas or regions in the United States. Some of these studies reveal that the collection and disposal of solid wastes increased at twice the rate of population growth.

(b) *Capital Investment Needs on an Annual Basis*

If the projected needs were to be financed over the next decade in equal proportions, the annual investment would amount to approximately $240 million per year. If the backlog, which is estimated to be at least 34 percent of the investment needs, were to be funded during the first year of the decade, about $820 million would be required. Spreading the remaining $1.6 billion evenly over the 10-year period would add $160 million to the first year's requirements. Thus, it would be necessary to provide more than 40 percent, or $980 million, of the total $2.42 billion capital investment needs during the first year. The remaining $1.44 billion would be required at a rate of $160 million annually during each of the remaining 9 years. Of this amount, approximately $90 million would be required by local government, and $70 million by private entrepreneurs.

(c) *Distribution of the Investment Needs by Type of Area and Size of Community*

According to the foregoing analyses, $428 million, or 17.8 percent of the total investment needs, are estimated to be needed in rural communities. In addition, it is estimated that communities in urban areas with a population of less than 2,500 people will require about 2.2 percent of the total capital need. It is also noted that most of these communities receive their refuse disposal service in conjunction with that of other urban communities in metropolitan areas. Therefore, it is estimated that agricultural areas and communities with a population under 2,500 persons will require 20 percent, or $488 million, of the total capital investment needs. In turn, 80 percent, or $1.932 billion, would be spent in communities with a population of 2,500 or more people. According to the U.S. census, people living in such communities are considered as living in urban areas.

It is extremely difficult to make valid estimates of the capital investment needs in different population categories. In order to make such projections, as requested, it is necessary to make some more or less arbitrary assumptions, and use information which is subject to further refinement. If, for example, population distribution and past spend-