

toward multiunit housing and great open spaces. Such change may gradually occur during the next 30 to 50 years, but during the next 10 years it will be inconsequential, with respect to sewer collecting systems design and construction. With the continuing actual or threatened shortages of water for all purposes, efforts to decrease water uses or consumption for certain purposes through technological advances and changes in living patterns will tend to keep the per capita need at the current level of usage, though many new uses of water will evolve during the period. Consequently, the current design criteria for sewer collecting systems is likely to be continued during the next decade.

2. ESTIMATED CAPITAL REQUIREMENTS

In order to (1) provide for the existing backlog of unsewered urban dwellers and the expected increase in urban dwellers during the next 10 years, (2) replace, modify or repair obsolete or undersized facilities, and (3) commence activities toward solving the combined sewer problem through construction of new separate sanitary sewers, it will be necessary that the total annual investment in sewer collecting systems be more than doubled during the next decade. Table 5 presents the estimated capital outlay requirements in millions of dollars, by population size group for the next 10 years, for sewer collection facilities based upon the foregoing considerations.

TABLE 5.—*Projected total capital construction requirements by community size by year 1966-75*

[In millions of dollars]

Size of community	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Less than 1,000.....	55	58	60	63	66	74	78	85	94	104
1,000 to 5,000.....	114	119	124	131	138	154	161	179	196	214
5,000 to 10,000.....	83	88	91	96	101	113	119	131	145	158
10,000 to 50,000.....	214	225	234	248	260	289	304	336	370	403
50,000 to 100,000.....	69	73	75	80	84	94	98	109	120	130
Over 100,000 people.....	233	240	255	269	283	314	330	365	403	438
Total.....	768	803	839	887	932	1,038	1,090	1,205	1,328	1,447

3. MEANS OF FINANCING

As in the past, the homebuilding industry will account for a portion of the projected needs. On the assumption that housing starts will increase to an annual rate of over 2 million units per year by 1975, the amount of funds expected from this source for sewer collection system construction will correspondingly increase by 33 percent. The balance of funds required consequently must be provided through public agencies, which must increase their activities in this area by 115 percent.

Based upon past activity, and current estimates of the Investment Bankers Association, the municipal tax-exempt bond market will not be able to absorb more than a 70-percent increase in dollar volume during the next decade. Assuming the two premises are correct (1) a 33-percent increase in private funds and (2) a 70-percent increase in public long-term borrowings, other sources of funds must be tripled by 1975 in order to meet the estimated dollar requirement for sewer collection system construction. Considering the variety of demands