4. *Distribution works.* Distribution works include pumping and storage facilities, water mains and their appurtenances—such as valves, hydrants, service connections, and meters—all of which are needed to transport the water to the consumer, measure it for billing, and afford fire protection.

(b) *Services Rendered*

Water utilities traditionally provide water service to residential, commercial, and industrial customers, as well as for general municipal purposes. Residential uses include drinking, cooking, bathing, toilet flushing, air conditioning, laundering, and sprinkling. Commercial service is furnished to a variety of businesses, including restaurants, hotels, motels, laundries, and florists, for the same general purposes. A prime factor in attracting and keeping industry is an adequate water supply to meet such varied industrial needs as water for cooling, process use, and cleaning. General municipal service consists of public uses like street sprinkling, swimming pools, fountains, public buildings, and—most important—firefighting. Provisions for the latter represent a substantial portion of the investment in water works facilities, especially for the smaller utilities.

Depending on the type of utility organization and State and local requirements, water utilities render these services both within and outside corporate limits and on both a retail and a wholesale basis An example of wholesale basis would be the sale of water to another utility or community, which then distributes the water to its own retail customers.

An approximate allocation of water to the various categories of users is shown in table 1.

Water production

The water industry uses average daily per capita water production as a measure of output. This is calculated by dividing the total gallons of water produced or purchased by the utility (or both) during the year by 365 and then again by the total population served. This gives a figure in gallons per capita per day (gpcd).

Per capita water production is lowest for small utilities and progresses upward with increasing size of utility, as shown in table 2.

Per capita water production varies among utilities. It also varies regionally, as shown in table 3, which includes data for cities of more than 10,000 population only for the years 1950, 1955, and 1960.

(c) *Standards of Performance*

The following general standard of performance for public water supply systems is taken from a policy statement of the American Water Works Association:

> Delivered water should as a minimum meet U.S. Public Health Service Drinking Water Standards. In addition, it should be as free of objectionable taste and odor, color, turbidity and staining elements, and as noncorrosive as practicable. It should be adequate in quantity for all sanitation and other domestic uses; safe and desirable for industrial and commercial use; adequate for fire protection service, and available on an uninterrupted basis with a minimum of fluctuations in pressure.

The 1962 Drinking Water Standards of the U.S. Public Health Service prescribe requirements for drinking water and water supply systems used by carriers and others subject to Federal quarantine regulations. Most States have adopted these standards as minimum