

Construction costs vary considerably, depending on size of utility, type and proximity of source of supply, type of treatment, and other factors. This is illustrated in figure 2, which shows the total investment in waterworks expressed in dollars per million gallons of average daily capacity for each of six water systems, the general features of which are given in figure 3. Plant investment costs range from \$700,000 per million gallons daily to more than \$1,700,000 per million gallons daily. Portions of the totals are allocated to various categories: source of supply, pumping station and treatment, transmission and distribution system, fire hydrants, and a miscellaneous category including such things as offices, laboratory, and other equipment. It should be added that the graphs in figure 2 are based upon the historical cost of the works, which are much less than the reproduction cost at current prices.

The annual operations and maintenance expenses for the six utilities, expressed in dollars per million gallons of water produced, are shown in figure 4. Expenses range from \$100 to \$250 per million gallons, and are broken down into the following categories: source of supply, pumping, treatment, transmission and distribution, customer accounting, and general expenses.

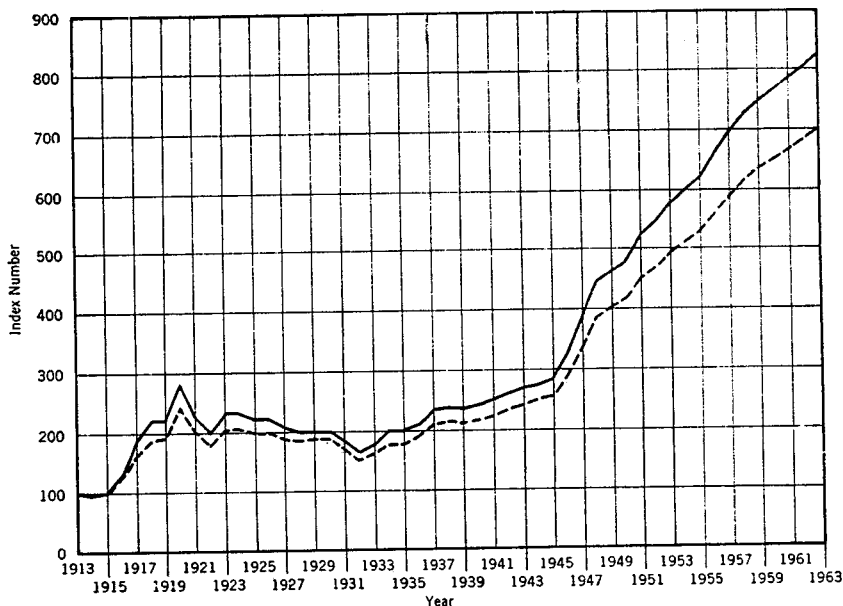


FIGURE 1. TYPICAL WATER UTILITY COST INDEXES

The cost indexes for two existing water plants are shown for the period 1913-63' with 1913 as the base year. The weighted components of water utility property are given in table 9. Data for plant A are indicated by the solid line; data for plant B by a broken line. From: Fick, Henry H., "Cost Indexes for Water Utility Property." Journal AWWA, 56:1022 (August 1964).