grant-in-aid programs for public works projects. The supplementary grants are regulated by the Secretary of Commerce and may go as high as 80 percent of the project cost when the State or other entity is unable to meet the required local share in other grant-in-aid programs.

Funds are also available in particular instances under the Appalachian Regional Development Act of 1965, Public Law 89-4. Section 212 authorizes \$6 million for sewage treatment works through fiscal year 1967. These funds may also be supplemented under the pro-

visions of section 214 of the act.

Several States have legislative authority to provide financial assistance of various kinds for municipal sewage treatment plants. California provides loans at 2 percent interest from a fund of \$1 million. Delaware provides 40 percent of the original construction cost or \$100,000 whichever is smaller. Georgia has a provision for 30 percent of costs or \$250,000 whichever is smaller. Georgia's program, however, has never been funded. Indiana provides for loans for plans and surveys. Maine provides for amounts equal to the Federal contribution and also provides for 50 percent or \$2,500 whichever is less for the cost of surveys. Maryland provides for matching the Federal grant, but the total of State and Federal grants may not exceed 50 percent, and also for construction loans and for planning assistance. New Hampshire guarantees the bonds of local governments for sewage treatment works and pays annually 40 percent of the amortization charges on construction costs. New Jersey provides for planning grants and for loans for drawing engineering specifications. New Mexico provides for grants to associations formed in rural and unincorporated areas for treatment facilities. Communities must be in existence more than 25 years and not be adjacent to incorporated places. New York provides for planning assistance and for grants for construction. The grants will cover 30 percent of construction costs and as much as 60 percent until the Federal share is made available. New York also provides for assistance for operation and maintenance costs up to one-third of such costs. Ohio provides for planning advances for villages which do not have a treatment facility. Oregon provides for the purchase of local community bonds when such communities are unable to meet private market requirements. Pennsylvania provides for 2 percent annually of the construction costs. Assistance up to 50 percent of planning costs is also provided. Vermont provides for assistance up to 20 percent of construction costs. Additional assistance is provided for communities with "limited economic base" who are required by the water resources board to construct treatment facilities. Total aid from all sources shall not exceed 75 percent of construction costs.

D. NEEDS AND PROSPECTIVE CAPITAL OUTLAYS

1. CAPITAL REQUIREMENTS

(a) Annual surveys of municipal waste treatment needs are conducted by the Conference of State Sanitary Engineers in cooperation with the Public Health Service. The 1966 survey reports that 1,285 communities presently discharging raw sewage require new plants for the treatment of wastes from a population of 6.7 million. An addi-